Town of Arlington
Department of Health and Human Services
Office of the Board of Health
27 Maple Street Arlington, MA 02476

Board of Health Meeting Agenda
Ground Floor Conference Room
Arlington Senior Center
Wednesday, April 10, 2019
5:30 PM

1. Acceptance of Meeting Minutes from February 6, 2019
2. CORRESPONDENCE
   RECEIVED:
   Lester J. Hartman, MD
3. DISCUSSION:
   Tobacco Update - D.J. Wilson
4. DISCUSSION:
   Novus Agenda- Adam Kurowski
5. HEARING:
   Keeping of Hens - 4 Alpine Street
6. HEARING:
   Microblading
7. HEARING:
   Regulation of the Arlington Board of Health Restricting the Sale of Medical Marijuana
8. UPDATES:
   19 Beck Road - Basement
9. UPDATES:
   Environmental Updates
10. UPDATES:
    Restaurant Updates
11. UPDATES:
    Public Health Nurse Updates

Adjourn

Town of Arlington, Massachusetts

Acceptance of Meeting Minutes from February 6, 2019

ATTACHMENTS:

	Type	File Name	Description
	Reference Material	02062019_Minutes_Board_of_Health_draft.pdf	Meeting Minutes 2-6-2019

Town of Arlington
Department of Health and Human Services
Office of the Board of Health
27 Maple Street
Arlington, MA 02476

Tel: (781) 316-3170
Fax: (781) 316-3175

D R A F T
Board of Health Meeting Minutes
Wednesday, February 6, 2019
BOH Conference Room – Mural Room
Arlington Senior Center
5:30 pm

Board Members in Attendance: Dr. Marie Walsh Condon, Mr. Kenneth Kohlberg, Dr. Kevin Fallon

Staff in Attendance: Natasha Waden, Director of Public Health; Padraig Martin, Health Compliance Officer; Kylee Sullivan, Health Compliance Officer

Others in Attendance: Kayla Lucente (Microblading), Han Qun (19 Beck Road), Liu Liang (19 Beck Road)

Recording Secretary: Kylee Sullivan, Health Compliance Officer

Meeting called to order by Dr. Marie Walsh Condon at 5:32 pm.

1. **AGENDA ITEM**

Acceptance of Meeting Minutes from December 5, 2018

A Motion was made by Kenneth Kohlberg which was seconded by Dr. Kevin Fallon to accept the December 05, 2018 Meeting Minutes as submitted.

Vote: 3 - 0 in favor of the motion (Unanimous)

2. **HEARING**

Agenda Change: the Microblading Hearing was moved ahead of the 19 Beck Road – Basement Hearing.

Microblading

Inspector Sullivan informed the Board that a variance request has been made by Ms. Kayal Lucente-Bantz to open a cosmetic tattooing (microblading) establishment in Town. Specifically Ms. Luncente-

Bantz is a requesting a variance from the Town of Arlington Rules and Regulations for Body Art Establishments and Practitioners Section 5 (requirement that cosmetic tattooing be conducted by a medical doctor licensed by the Commonwealth) and Section 12 (requirement that practitioners must have at least two years experience to perform tattooing in Town).

Ms. Lucente-Bantz discussed her proposal to cosmetically tattoo eyebrows on clients and provided the Board reasons why she should be granted the variance, including that the medical doctor requirement is too stringent for the work she will be performing. Doctor Walsh Condon agreed with Ms. Lucente-Bantz that the medical doctor requirement for cosmetic tattooing is outdated and the Board should look into amending this section of the regulations. Doctor Walsh Condon explained that the reasoning behind this requirement was that when the regulations were established, tattooing eyeliner to eyes was popular but the tattooing of eyebrows does not require the intensive training that tattooing eyeliner requires.

Doctor Walsh Condon asked Ms. Lucente-Bantz to clarify what her intentions were with cosmetically tattooing eyebrows and any additional features on clients to which Ms. Lucente- Bantz stated at this time she is looking to only tattoo eyebrows. Mr. Kohlberg suggested that Ms. Lucente-Bantz rewrite her variance request to more clearly explain that her intent is only to tattoo eyebrows on clients. All Board members expressed concern for Ms. Lucente-Bantz's lack of experience in the field of tattooing. The Board decided to table their vote on this hearing until the next Board meeting. This gives Ms. Lucente-Bantz the opportunity to rewrite her variance request and research further into possible options for increasing her experience in cosmetic tattooing.

A Motion to table the hearing was made by Dr. Fallon and seconded by Mr. Kohlberg.

Vote: 3 - 0 in favor of the motion (Unanimous)

3. HEARING

19 Beck Road - Basement

Inspector Padraig Martin reported that a housing inspection of 19 Beck Road was conducted on January 17, 2019 which resulted in an order letter outlining several violations of the State Sanitary Code in the basement dwelling unit. Inspector Martin discussed how some of the violations observed in the basement unit are challenging to achieve compliance with, such as the floor-to-ceiling height and the amount of transparent or translucent glass in the kitchen and living room. Some of the violations listed in the order letter have been brought into compliance, as observed during a re-inspection on February 6, 2019. Compliance has been achieved with the following violations: the smoke detector and the handrail in the basement stairway. After speaking with the property owner, Liu Liang, Inspector Martin informed the Board that Ms. Liang plans on moving the family occupying

the basement unit to rooms in the upstairs of the dwelling. Dr. Fallon inquired if the basement would continue to be used if the family was moved upstairs to which Inspector Martin clarified that no, the basement would no longer be occupied.

Ms. Liang reiterated her plan to move the family occupying the basement to rooms upstairs but that one of her other occupants has to move out first in order to do so. Ms. Liang stated that the other occupant agreed to move out and will be doing so shortly. Dr. Walsh Condon restated that, although the basement can be used by occupants, it cannot be used as a sleeping space and as a result the basement cannot be rented to occupants.

Director of Public Health Natasha Waden asked Ms. Liang how many people are living at the property to which Ms. Liang responded two single occupants and a family of four. Dr. Walsh Condon asked how many bedrooms are in the dwelling and was informed that there are six total bedrooms. Director Waden discussed issues related to the potential of an illegal rooming house and that even though currently the number of occupants would not constitute an illegal rooming house, this is something for Ms. Liang to keep in mind and it would ultimately be an Inspectional Services issue.

Dr. Fallon asked for clarification as to whether anyone is sleeping in the basement presently to which Ms. Liang informed him that yes, the family of four is currently occupying the basement but that the family wants to move to the upstairs floors. Inspector Martin stated that this would be an appropriate solution. Director Waden informed the Board that Inspectional Services was notified of this situation and that the Health Department will follow up for additional information.

Second floor occupant Han Qun addressed the Board stating that previously there were ten people living in the dwelling and that a family of three occupied the basement before the current family of four moved in during November. Ms. Qun added that after speaking with the family, she believes that they do not want to move upstairs.

Mr. Kohlberg stated that this situation requires Inspectional Services involvement. Dr. Walsh Condon added that Inspectional Services will contact the property owner and in the meantime the basement unit cannot be occupied. If Ms. Liang would like to rent out the basement, then additional work would be required to bring the unit into compliance.

4. HEARING

Regulation of the Arlington Board of Health Restricting the Sale of Medical Marijuana

Inspector Martin explained that wording was updated in the Medical Marijuana Regulations to reflect the change in state licensing of Medical Marijuana Establishments from the Massachusetts Department of Public Health to the Cannabis Control Commission. The Board did not have any questions regarding the updated wording. Inspector Martin discussed the option of similarly updating the wording in Arlington's Regulation to Ensure the Sanitary and Safe operation of Adult-Use Marijuana Establihsments and the Sale of Adult-Use Marijuana. Dr. Walsh Condon asked what the benefit of this would be to which Director Waden answered that it would grant the Department authority to enforce the Cannabis Control Commission regulations if a violation is observed during inspection. Dr. Walsh Condon asked if a hearing would be required to make these wording changes and she was informed that yes, a hearing would need to be held. Dr. Walsh Condon agreed to follow the Department's recommendation to update the wording which was supported by Dr. Fallon and Mr. Kohlberg.

A Motion was made by Dr. Walsh Condon which was seconded by Dr. Kevin Fallon to update the language in the Regulation of the Arlington Board of Health Restricting the Sale of Medical Marijauna to reflect the change in licensing from the Massachusetts Department of Public Health to the Cannabis Control Commission.

Vote: 3-0 in favor of the motion (Unanimous)

5. **DISCUSSION**

Hemp Based CBD Oil

Inspector Sullivan informed the Board that a permitted residential kitchen in Town contacted the Health Department for guidance on the use of hemp-based CBD oil (cannabidoil) in food. Sullivan explained that hemp-based CBD oil is derived from the Cannabis plant, much like marijuana however, there is a significantly smaller amount of THC, (tetrahydrocannabinol), the psychoactive component of marijuana. After discussing this matter with the MA Department of Public Health, the Cannabis Control Commission, the MA Department of Agricultural Resources, local health departments, and Cheryl Sbarra of the MA Health Officers Association, the Health Department was informed that there are currently many unknowns about this matter. However, the majority of the resources contacted stated that hemp-based CBD oil in food is not an approved food additive according to the FDA. Due to the lack of data supporting the use of hemp-based CBD oil in food, the Health Department asked for guidance from the Board on a community-wide policy to handle requests for the addition of this substance in food. The Board guided the Department to prohibit the addition of hemp-based CBD oil in food until further direction is provided from the FDA.

6. **DISCUSSION**

Tobacco Regulation Update

Director Waden informed the Board that Karen Koretsky, Director of the Arlington Youth Health and Safety Coalition, provided the Health Department with information regarding Somerville's recent ban on menthol-flavored tobacco and e-cigarette/vape products. Inspector Martin added that Somerville made three tobacco amendments: 1) removed menthol, mint, and wintergreen from the exempted section of the characterizing flavor definition and moved it to the list of flavors that are considered flavored tobacco; 2) limited the sale of e-cigarettes to adult-only retail tobacco stores; 3) re-categorized tobacco as a flavored tobacco product for e-cigarettes.

Dr. Walsh Condon clarified that now, in Somerville, a customer can no longer walk into a regular tobacco retailer and purchase a mint/menthol-flavored tobacco product. Director Waden confirmed this adding that mint/menthol-flavored tobacco products can only be purchased in adult-use only tobacco stores. Inspector Martin stated that Needham is one of the only other communities that has made similar tobacco regulation amendments. Director Waden informed the Board that, because there are no adult-use only tobacco stores in Arlington, an amendment similar to the one Somerville recently passed would effectively zone out mint/menthol-flavored tobacco in Town and so the Department would need discuss this in detail with Town Counsel. Inspector Martin added that after consulting with D.J. Wilson from the Massachusetts Municipal Association (MMA), the Department was informed that all three of Somerville's amendments will likely be challenged in a court of law and there will be more information about this matter around the summertime. Mr. Kohlberg asked why there was such a focus on mint/menthol-flavored tobacco products to which he was informed that it is a result of how, unlike other flavored tobacco, there are no restrictions on the sale of mint/menthol-flavored tobacco products. Additionally, studies show that restricting mint/menthol-flavored tobacco products is linked to a decrease in youth use of tobacco.

The Board agreed to wait until more information is available to make a determination about this matter.

7. UDATES

Environmental Updates

- Inspector Sullivan informed the Board that she was invited to speak to the Conservation Commission about rodent control and the use of rodenticides in Town. Inspector Sullivan discussed Integrated Pest Management (IPM) with the Conservation Commission and explained that the Health Department works with and educates residents and businesses to improve sanitation and exclusion measures around Town as a means of preventing rodent activity instead of relying on the use of rodenticide to reactively treat a rodent problem.

- Insector Sullivan discussed the Department's collaboration with the Arlington Police Department to better connect with and serve people in Arlington who are experiencing homelessness or are on the verge of homelessness. Inspector Sullivan reported that during the annual Point in Time Count, which took place on January 31st between midnight and 3:00 AM and is mandated by HUD, there were no homeless persons observed in Arlington.

- Director Waden informed the Board that Reed Brook in McClennen Park will be dredged in coming months which will improve water flow and decrease mosquito breeding areas.

- Director Waden reported that a Warrant Article for Town Meeting was submitted for restricting the sale of polystyrene in Town. This is the only Warrant Article submitted that would fall under the purview of the Board.

8. UPDATES

Restaurant Updates

Inspector Martin reported that since the last Board meeting, two commercial establishments and two residential kitchens have been permitted. Additionally, there are seven plan reviews open for establishments that will soon open. Inspector Martin informed the Board that the State adopted the 2013 Food Code in late 2018, and since Arlington was already in the process of adopting this version of the Code, Arlington's transition is going smoothly.

9. UPDATES

Public Health Nurse Updates

No public health nurse updated were provided.

Meeting Adjourned @ 7:21 pm.

Town of Arlington, Massachusetts

Lester J. Hartman, MD

ATTACHMENTS:

	Type	File Name	Description
🗋	Reference Material	Correspondence_Received_2.pdf	Correspondence Received BOH - Dr Hartman
🗋	Reference Material	flavor_map_144_dover.png	Attachment 1
🗋	Reference Material	menthol-2.pdf	Attachment 2
🗋	Reference Material	toxicogen_harm_mint_enthol_and_imint.pdf	Attachment 3

Subject: Fwd: Menthol and mint restriction to 21+ smoke/vape shop (Lynn and Swmpscott)
To: "Natasha Waden" <NWaden@town.arlington.ma.us>
From: "Christine Bongiorno" <CBongiorno@town.arlington.ma.us>
Date: 02/04/2019 10:25 AM

Christine Bongiorno, MPH
Director of Health and Human Services
Town of Arlington
27 Maple Street
Arlington, MA 02476
(781)316-3170
www.arlingtonma.gov/hhs

From: "Hartman, Lester" <Lester.Hartman@childrens.harvard.edu>
To: "cbongiorno@town.arlington.ma.u" <cbongiorno@town.arlington.ma.u>
Date: Sat, 2 Feb 2019 11:03:31 +0000
Subject: Menthol and mint restriction to 21+ smoke/vape shop (Lynn and Swmpscott)

Dear Ms Bongiorno,

I am the pediatrician who was involved in the tobacco21 campaign. THanks again for Arlington's progressive public health policyMark Gottlieb director of Northeastern' Law School Public Health Advocacy Institute and Dr Jonathan Winickoff (Harvard Pedatric at MGH) who partnered with me on the Tobacco21 legislation have joined forces to resticting mnt and menthol to 21+ smoke shop. Anecdotally, in my practice when towns have exempted mint and menthol, the high school flavor of choice goes from mango to mint. Would like to meet with your BOH if you think there would be a productive discussion.

Thanks,
L

1 Attachments
menthol-2.pdf (685 kB)

From: "Hartman, Lester" <Lester.Hartman@childrens.harvard.edu>
To: "cbongiorno@town.arlington.ma.us" <cbongiorno@town.arlington.ma.us>
Date: Fri, 15 Mar 2019 13:34:56 +0000
Subject: Flavorrs-including mint and Menthol restiction or flavor restriction in Winthrop

Dear Dr Condon, Dr Fallon, and Mr Kolhberg,

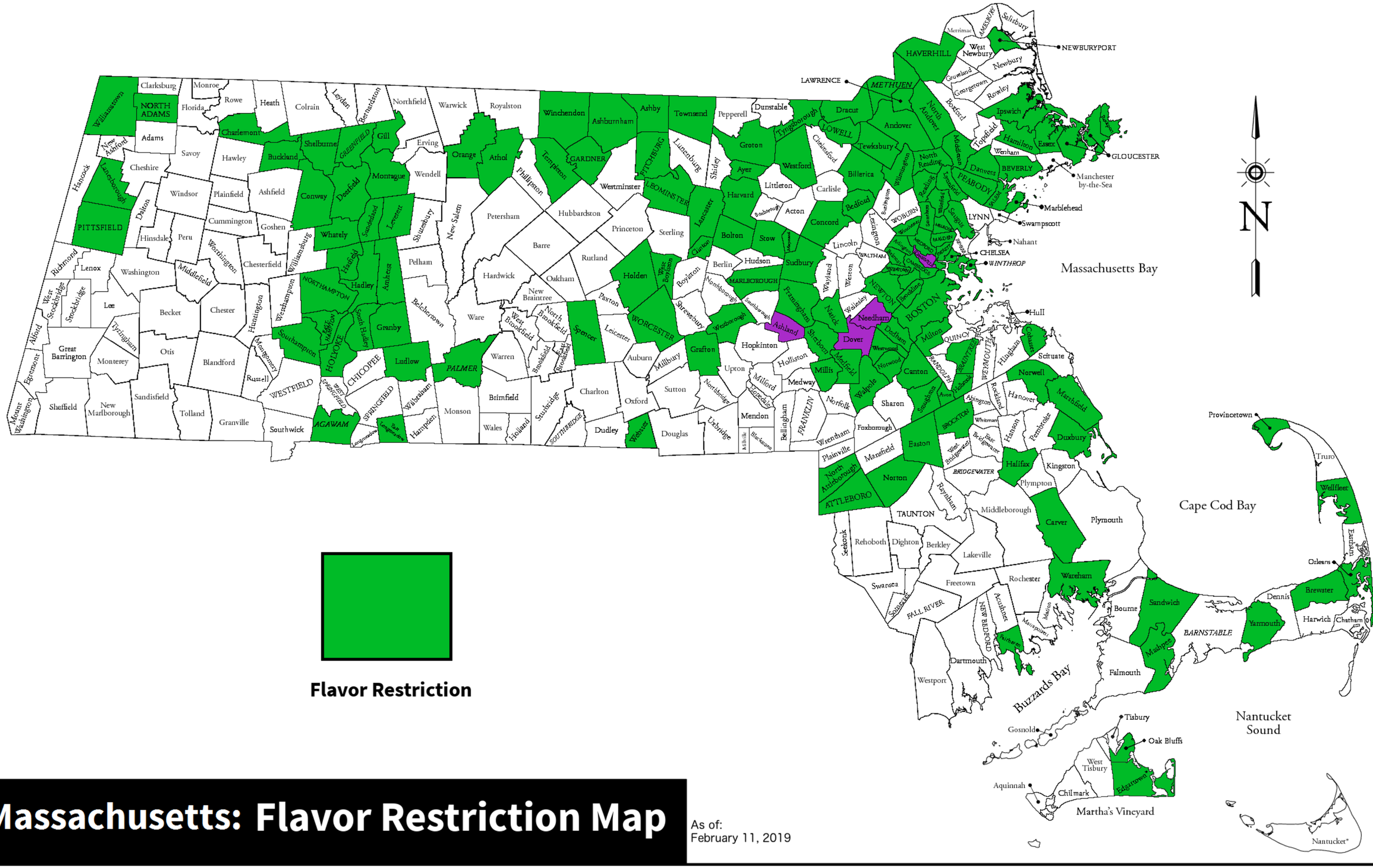
Hope all is well. Cranking back up to regulate mint and menthol into 21+smoke/vape shop or ban all flavors (Prop E San Franciso). We have 5 communities already restricting and are engaging Boston. In my experience with towns restricting all flavors except mint and menthol, mint is the most common flavor in high schools. Pot JUUL (esp mint) anecdotally about 70% of high school seniors have tried and 28% are regular users. With Maura Healey already working on internet sales. We have an opportunity to reduce JUULing in high Schools. Can we get together?
Thanks,
L

Purple on the flavor map represents the towns

https://truthinitiative.org/news/menthol-facts-stats-and-regulations

https://www.youtube.com/watch?v=KTKu0A2ym0M

Lester J. Hartman, MD MPH FAAP
Westwood-Mansfield Pediatric Associates
781-326-7700 | lester.hartman@childrens.harvard.edu | www.wmpeds.com
"Proactive in your child's care. Empowering families for over 55 years."
@DrHartmanWMPEDS | #Tobacco21



Massachusetts: Flavor Restriction Map

As of:
February 11, 2019

Villanti et al. BMC Public Health (2017) 17:983
DOI 10.1186/s12889-017-4987-z

BMC Public Health

RESEARCH ARTICLE Open Access

Menthol cigarettes and the public health standard: a systematic review

Andrea C. Villanti[1,2,3*], Lauren K. Collins[1], Raymond S. Niaura[1,3,4], Stacey Y. Gagosian[5] and David B. Abrams[1,3,4]

Abstract

Background: Although menthol was not banned under the Tobacco Control Act, the law made it clear that this did not prevent the Food and Drug Administration from issuing a product standard to ban menthol to protect public health. The purpose of this review was to update the evidence synthesis regarding the role of menthol in initiation, dependence and cessation.

Methods: A systematic review of the peer-reviewed literature on menthol cigarettes via a PubMed search through May 9, 2017. The National Cancer Institute's Bibliography of Literature on Menthol and Tobacco and the FDA's 2011 report and 2013 addendum were reviewed for additional publications. Included articles addressing initiation, dependence, and cessation were synthesized based on study design and quality, consistency of evidence across populations and over time, coherence of findings across studies, and plausibility of the findings.

Results: Eighty-two studies on menthol cigarette initiation ($n = 46$), dependence ($n = 14$), and cessation ($n = 34$) were included. Large, representative studies show an association between menthol and youth smoking that is consistent in magnitude and direction. One longitudinal and eight cross-sectional studies demonstrate that menthol smokers report increased nicotine dependence compared to non-menthol smokers. Ten studies support the temporal relationship between menthol and reduced smoking cessation, as they measure cessation success at follow-up.

Conclusions: The strength and consistency of the associations in these studies support that the removal of menthol from cigarettes is likely to reduce youth smoking initiation, improve smoking cessation outcomes in adult smokers, and in turn, benefit public health.

Keywords: Cessation, Dependence, Policy, Youth tobacco use, Public health

Background

Menthol has been added to tobacco products as a characterizing flavor since at least the 1920s, but many of the current menthol brands were introduced in the mid-1950s [1, 2]. In 2013, the most recent year of data from the Federal Trade Commission, menthol cigarettes represented 30% of the cigarette market [3]. Tobacco companies have also noted that the menthol segment of the market continues to grow [4], including Reynolds American and Philip Morris USA who have continued to expand their distribution of menthol cigarettes in the past year [5].

The Tobacco Control Act banned all candy and fruit flavors as characterizing flavors of cigarettes. The law did not include menthol in that ban, nor did it address flavors in non-cigarette tobacco products [6]. However, the Act makes clear that the Food and Drug Administration (FDA) has the authority to issue a product standard to ban menthol in cigarettes, or any other tobacco product, to protect public health. In fact, the Act required the Tobacco Product Scientific Advisory Committee (TPSAC), as its first order of business, to review the state of the science on menthol and make a recommendation to the FDA based on the public health standard [7]. TPSAC undertook a review of the science and issued a comprehensive report concluding that it would be in

* Correspondence: andrea.villanti@uvm.edu
[1]The Schroeder Institute for Tobacco Research and Policy Studies at Truth Initiative, Washington, DC, USA
[2]Vermont Center on Behavior and Health, Department of Psychiatry, University of Vermont, Burlington, VT, USA
Full list of author information is available at the end of the article

the interest of public health to remove menthol cigarettes from the market [8]. Further, FDA, conducted an independent review of the science in 2013. This report concluded that it is "likely that menthol cigarettes pose a public health risk above that seen with non-menthol cigarettes" [9].

The purpose of the current review was to update the state of the evidence on menthol in cigarettes with respect to two of the three key elements of the public health standard: first, whether there is an increased or decreased likelihood that those who do not currently use tobacco products, most notably youth, will start to use tobacco products; and second, whether there is an increased or decreased likelihood that existing users of tobacco products will stop using such products [10]. In addition to providing a third independent summary of the evidence on menthol, this study highlights findings published after the FDA's 2013 review.

Methods

We undertook a systematic review using a PubMed search of the peer-reviewed literature through May 9, 2017 with the terms "menthol AND cigarette*." The National Cancer Institute's Bibliography of Literature on Menthol and Tobacco [11] and the FDA's original 2011 report [9] and 2013 addendum [12] were reviewed for additional publications not captured in the PubMed search. Articles published prior to 2013 were reviewed for inclusion and coded by AV; articles published after 2013 were reviewed for inclusion by LC and coded by LC and AV. In 2016, the review was moved into a centralized database and searches were rerun within Eppi-Reviewer 4 (EPPI-Centre, University of London); at this time, all abstracts were double-checked against the inclusion criteria for quality control purposes. The May 2017 search update was conducted within the Eppi-Reviewer platform. Lab-based studies and studies with no direct comparison between menthol and non-menthol use were excluded. Published reviews, commentaries, case reports, editorials, letters to the editor, meeting proceedings, and policy statements were also excluded. Included studies were classified into at least one of 6 categories, including 1) Initiation; 2) Dependence; 3) Cessation; 4) Prevalence; 5) Marketing; and 6) Policies.

Since the main goal of the current review was to update a narrative review on the Initiation, Dependence, and Cessation categories and a range of study types were included, we did not employ a standardized assessment of the quality of included studies (e.g., PRISMA checklist). To synthesize the evidence for these three categories, we:

(1) Examined the methods and designs of the studies, the rigor with which they were conducted, and the limits of interpreting data with respect to the population, place, and time of the study;
(2) Categorized individual studies according to their methods and design and evaluated studies that used comparable methods to determine consistency of the evidence across populations and over time. We examined evidence across these comparable studies to assess the strength of the association and to determine if a temporal relationship was present between menthol cigarette use and smoking initiation or cessation;
(3) Evaluated the body of scientific evidence to determine whether findings of individual studies were coherent with each other and with our broader understanding of tobacco use in the United States; and
(4) Considered the plausibility of these findings in the context of tobacco industry and related documents.

Finally, we asked whether positive associations exist and whether chance, bias, and confounding could be ruled out with reasonable confidence. In keeping with a classification scheme based on FDA's public health standard, and recognizing that decision-makers must often act in the face of scientific uncertainty, we asked whether the evidence in a particular area was sufficient to conclude that a relationship was more likely than not, whether the evidence shows that a relationship was at least as likely as not, whether the evidence is insufficient to conclude that a relationship was more likely than not, or whether there was insufficient evidence to make a determination of strength of evidence. The focus of the evidence synthesis was on studies conducted in the United States; data presented from other countries is noted as such throughout the text.

Results

Of the 131 empirical articles on menthol cigarettes included in the full review (see Fig. 1), 82 were relevant to initiation ($n = 46$; Additional file 1: Table S1), dependence ($n = 14$; Additional file 2: Table S2), and cessation ($n = 34$; Additional file 3: Table S3). The remaining 49 articles addressed other topics: prevalence ($n = 13$), marketing ($n = 22$), and policies ($n = 14$). Thirty-three of these articles were published after 2013. Details on the findings by study category are described in detail below.

Initiation

The prevalence of menthol cigarette use is higher in youth than young adults and adults

A 2015 study using 2004–2010 data from the National Survey on Drug Use and Health (NSDUH), adjusted for misclassification of menthol brand, showed that from 2008 to 10, 56.7% of youth smokers (aged 12–17)

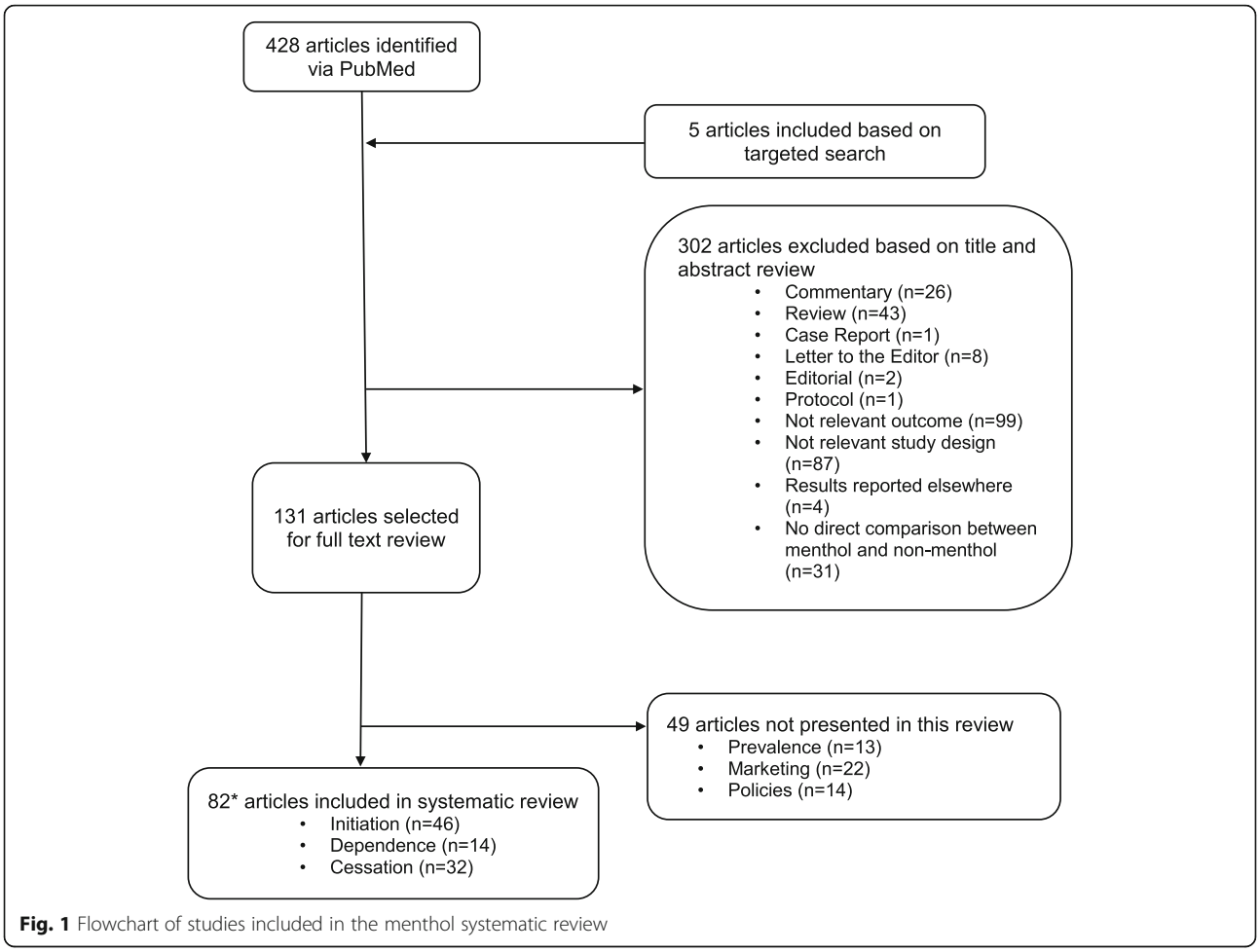


Fig. 1 Flowchart of studies included in the menthol systematic review

smoked menthol cigarettes [13]. This compares with an overall menthol cigarette prevalence (youth and adults) of 35.2% and represents 1.2 million menthol smoking youth. A 2016 follow-up study in NSDUH highlighted that the percentage of menthol cigarette smokers increased 4.1 percentage points between 2008–2010 and 2012–2014, with youth smokers remaining the age group with the highest prevalence of menthol cigarette use [14]. These findings were also confirmed using 2013–2014 data from the Population Assessment of Tobacco and Health (PATH) Study [15]. Among current cigarette smokers, 59.5% of youth used mentholated cigarettes compared to 37.1% of adults. When looking only at exclusive cigarette smokers, the prevalence of mentholated cigarette use remained higher in youth (56.5%) compared to adults (39.5%).

Black smokers report a high prevalence of menthol cigarette use, regardless of age [13, 16–21]. A cross-sectional study of adult daily smokers found that nearly 80% of black smokers smoked menthol cigarettes, the highest prevalence across racial/ethnic groups [22]. Controlling for gender, race/ethnicity, household income and days smoked in the past month, the odds of smoking mentholated brands were more than three-fold higher in the youngest age groups (12–15 and 16–17) of smokers compared to smokers aged 35 and older in both 2008–2010 [13] and 2012–2014 [14]. These estimates are slightly higher than those published in the 2009 *NSDUH Report: Use of Menthol Cigarettes* [16] and NSDUH analyses by Caraballo and Asman [19] and Rock et al. [18], but account for two more years of data collection and adjustment for misclassification of menthol status. Together, these studies demonstrate the stability of these nationally-representative estimates over seven years highlighting higher rates of menthol use in youth compared to adults from 2004 to 2014.

There is a persistent age gradient in menthol cigarette use among the youngest smokers

Results from the 1999, 2000, and 2002 National Youth Tobacco Survey (NYTS), a survey administered to approximately 25,000 middle and high school students in each wave, confirm a statistically significantly higher prevalence of menthol cigarette use among middle

school students compared to high school students [23–25]. Results differ for some racial/ethnic subgroups [26, 27]. In the 2006 NYTS, 57.1% of middle school smokers reported that their usual brand was menthol compared to 43.1% of high school smokers [28]. Data combined for years 2004, 2006, and 2009 of the NYTS showed that 49.4% of middle school current smokers reported smoking menthol cigarettes compared to 44.9% of high school current smokers [19]. In 2004 and 2006 NYTS, Newport was the second most popular brand among youth smokers [29].

Studies of youth and adults published prior to 2013 highlight that the highest prevalence of menthol cigarette use occurs among youth smokers, followed by young adult smokers, and that both are significantly higher than menthol cigarette use among older adult smokers [17–19]. These findings are consistent with studies using more recent data that were published after 2013 [13–15, 30].

Other recent national studies examining adults only consistently report that young adult smokers (aged 18–24 or 18–25) are significantly more likely to use menthol cigarettes than older adult smokers (aged 25+ or 26+), even after controlling for other potential confounders including socioeconomic status, sexual orientation [31], and psychological distress [32]. One study in a national sample of young adults aged 18–34 found that menthol cigarette smokers were significantly younger than non-menthol cigarette smokers in bivariate analyses, but this did not persist in multivariable models, likely due to the restricted age range of the sample [33].

Menthol cigarette use among youth has not decreased in the past decade, despite decreases in non-menthol cigarette use

Giovino et al. showed that the prevalence of smoking menthol cigarettes remained constant among youth (aged 12–17) from 2004 to 2010, at the same time that the prevalence of non-menthol cigarette use decreased significantly in this age group [13]. Furthermore, menthol cigarette use significantly increased over this time period in young adults (aged 18–25) while the prevalence of non-menthol cigarette use decreased significantly. These findings were consistent with the 2011 NSDUH report on *Recent Trends in Menthol Cigarette Use* [17]. In updated NSDUH data from 2014, menthol cigarette prevalence was higher than non-menthol cigarette prevalence in youth and young adults [14].

Recent youth initiates are significantly more likely to use menthol cigarettes than youth who have smoked longer than one year

Estimates from the NYTS and NSDUH also demonstrate increased menthol cigarette use among recent youth initiates. Two studies [16, 34] combining waves of national data on youth smoking report a higher prevalence of menthol cigarette use among youth who have been smoking less than one year compared to those who have smoked more than one year. One of the studies combined data from five years of the NSDUH (2004–2008) and the other used two years of data from the NYTS (2000 and 2002). In the NSDUH study, past month smoking of menthol cigarettes was more likely among smokers aged 12–17 who began smoking in the past 12 months than among those who had been smoking for more than a year (49.2% vs. 43.8%); findings were similar in young adults where past-year initiates had higher menthol use than longer-term smokers (40.2% vs. 36.4%) [16]. The 2011 NSDUH report on menthol also reported that the prevalence of menthol use in recent initiates among all participants aged 12+ increased during 2007–2010 as compared to 2004–2006 and that past month menthol use was higher among recent initiates compared to longer-term smokers in both time periods [17]. In the NYTS study, middle school students who had been smoking for less than 1 year were significantly more likely to smoke menthol cigarettes compared with middle school students who had been smoking for more than 1 year (62.4% vs. 53.3%, $p = 0.002$) [34]. Two recent analyses in the NYTS data [19, 28] did not find a significant relationship between menthol cigarette use and smoking initiation among adolescents. One study using 2006 NYTS data shows that the proportion of middle school smokers whose usual brand was menthol was higher among those who smoked for 1 year or more (54.7%) than among those who smoked for less than a year (42.2%) [28]. Among high school youth, these percentages were similar for smokers who had smoked for less than and for more than 1 year (42.8% vs. 43.1%). Another study combining data across years of the NYTS (2004, 2006, and 2009) used cigarettes smoked per day and days smoked per month as proxy measures for early "stages" of use (initiation) and showed no difference in the prevalence of menthol use by "stage" [19].

Longitudinal studies demonstrate that initiation with menthol cigarettes facilitates progression to established use in young smokers

Prior to 2014, one cross-sectional study and two longitudinal studies assessed the impact of menthol initiation on smoking behavior. Conducted in a southeastern city, the cross-sectional study showed that black middle and high school students, who smoke at lower rates than whites, greatly accelerate their cigarette consumption when their brand of choice contains menthol [35]. African American menthol users were between 1.7 and 3.5 more likely to fall into a higher category of cigarette

consumption than whites. A longitudinal study, conducted by Nonnemaker et al. [36], documents that adolescents who initiated smoking with menthol cigarettes during the course of a cohort study were more likely to progress to established smoking by the end of the three-year study compared to those who initiated with non-menthol cigarettes. The stringency of the definition of "established smoking" in this study (i.e., at least 100 cigarettes lifetime plus smoking on 20–30 of the past 30 days) provides strong evidence for the relationship between menthol cigarette use and progression to regular use given the typical adolescent definition of current cigarette use as any use in the past 30 days. The second longitudinal study, published by Dauphinee et al. [37] shows that recognition of Newport cigarettes, a leading menthol brand, was associated with smoking experimentation in a large sample of adolescent never-smokers at 12-month follow-up.

Findings from four recent cross-sectional studies further support these findings. One cross-sectional study of a nationally-representative sample of Canadian high school students showed that menthol smoking youth had a significantly higher odds of reporting intent to continue smoking compared to non-menthol smoking youth [38]. These findings held when examining established and experimental smokers separately. A second cross-sectional study examined changes in smoking behavior using a national sample of young adult smokers and showed that menthol cigarette use nearly doubled the odds of increased smoking behavior, including transitioning from no smoking to current smoking or from someday to every day smoking in the past year [39]. These findings are consistent with recent analyses in Wave 1 of the PATH study that documented a strong association between first use of a flavored tobacco product and current tobacco use among youth and adults [15]. A fourth cross-sectional study, which conducted regression analyses using data from four nationally representative samples of youth and adult current smokers, found that current menthol use was not associated with an increased odds of being a daily versus non-daily smoker in youth and adults [40].

Young smokers are likely to remain with their "starter" type of cigarette over time

Data from the National Youth Smoking Cessation Survey (NYSCS), a two-year (2003–2005) longitudinal telephone study of adolescent and young adult cigarette smokers aged 16–24 confirm that 85% of baseline menthol smokers remained menthol smokers at 24 months and 93% of baseline non-menthol smokers remained non-menthol smokers [41]. In a study published in 2013 by Nonnemaker et al., the majority of adolescent smokers who initiated with menthol cigarettes remained menthol smokers at follow-up (63%); this was similar to the proportion of adolescent smokers who initiated with non-menthol cigarettes and remained with non-menthol smokers at follow-up (62%) [36].

Two studies published after 2013 support these findings. One study, conducted over one year in the Truth Initiative Young Adult Cohort, bolsters the findings that the majority of young adult smokers, aged 18–34, remain with their initial type of cigarette over time [42]. In this study, young adults smokers who initiated with menthol cigarettes were more than eight times more likely to remain menthol cigarette smokers than those who initiated with non-menthol cigarettes. The second study, focused more broadly on flavored tobacco use in Wave 1 of the PATH study, found first use of a flavored tobacco product was associated with a more than two-fold higher prevalence of exclusive menthol cigarette use in adults, with young adults being more likely to use menthol cigarettes [15].

The findings regarding an age gradient in menthol cigarette use – Increased levels of menthol smoking in the youngest age groups – are not attributable to menthol brand misclassification or socioeconomic status

Misclassification of menthol cigarette use has been identified in youth studies [28] and tobacco control researchers have also raised the notion that menthol cigarette use may be associated with economic pressure to use fewer cigarettes [43], thus menthol use may be due to lower socioeconomic status. These data show that the age gradient in use is not an artifact of misclassification of menthol use [23]. They also highlight that use of menthol cigarettes is not explained by socioeconomic status, assessed as household income.

Four papers published after 2013 confirm these earlier results. Analyses using 2008–2009 NSDUH data support that young adults (aged 18–25) are significantly more likely to use menthol cigarettes than older adults, after controlling for age, gender, race/ethnicity, education, income, marital status, health insurance, cigarettes per day, time to first cigarette, and psychological distress [32]. Giovino et al. addressed potential misclassification of menthol brand among youth and adults in 2008–2010 NSDUH data, showing a persistent age gradient in menthol cigarette use across gender, race/ethnicity, household income, and number of days smoked per month [13]. These findings held in updated analyses of 2012–2014 NSDUH data [14]. A fourth study published in 2016 using 2012–2013 NSDUH data showed that menthol cigarette use was also not explained by urban/rural differences [44].

Menthol cigarette smoking is correlated with other risk behaviors in young people

Menthol cigarette smoking has been associated with other tobacco use in young adults (small cigars [45] and other flavored tobacco products [46]) and alcohol and

marijuana use in youth [47–49]. In a community-based sample of adolescents in the U.S., past 30-day menthol cigarette smokers reported higher lifetime marijuana use, but not marijuana use in the past 30 days compared to non-menthol smokers [48]. In a sample of adolescent daily smokers seeking cessation treatment, menthol cigarette use was correlated with past 30-day marijuana use [48].

In a nationally-representative sample of Canadian 7th through 12th grade students published after 2013, menthol cigarette smokers were significantly more likely to report binge drinking or using marijuana in the past year compared to non-menthol smokers [47]. In national NSDUH data collected in 2013 and 2014 among participants aged 12 and older, a higher percent of marijuana/menthol cigarette users were 12–17 years of age compared to other usage groups (i.e., marijuana/non-menthol cigarettes, menthol cigarettes only, non-menthol cigarettes only) [49].

The tobacco industry has long understood the appeal of menthol cigarettes as starter products for youth

Historical tobacco industry documents underscore menthol brands as starter products for youth (i.e., "Menthol brands have been said to be good starter products because new smokers appear to know that menthol covers up some of the tobacco taste and they already know what menthol tastes like, vis-à-vis candy" [50]) and recognize the importance of adolescent smokers to the success of menthol brands (i.e., "The success of Newport has been fantastic during the past few years. Our profile taken locally shows this brand being purchased by black people (all ages), young adults (usually college age), but the base of our business is the high school student" [51]). Recent tobacco industry document reviews have also underscored the relationship between menthol cigarette use, youth smoking initiation and tobacco dependence, as understood and manipulated by the tobacco industry [52–54]. Data from financial analysts support that the menthol marketplace is strongly influenced by youth smoking. Tobacco industry experts at Morgan Stanley noted in 2012 that menthol cigarettes continue to have a higher market share in younger age groups, despite the fact that youth smoking continues to decline [55]. Increased market share of menthol cigarettes among youth has also been documented outside the U.S. [56, 57].

In two studies published after 2013, the appeal of menthol flavoring was demonstrated to influence intention to smoke and initial smoking [58, 59].

Summary - initiation

Fifteen years of national studies of tobacco use across different populations and time periods arrive at the same conclusions: there is a strong pattern of a higher – and growing – proportion of menthol cigarette use among youth (aged 12–17) than adults, and especially among younger adolescents and recent youth initiates. The results from large, representative studies provide evidence of an association between menthol and youth smoking that is robust and consistent in magnitude and direction and is unlikely to be due to bias, confounding, or chance. Among all youth and young adults, not just current smokers, the prevalence of smoking non-mentholated brands decreased from 2004 to 2014; as of 2014, menthol cigarettes were more prevalent than non-menthol cigarettes in youth and young adults, indicating that menthol cigarettes are gaining market share in these age groups.

More particularly, the replication of these findings over time using different studies and populations provides evidence of consistency. Data showing a high prevalence of menthol use among youth, in addition to higher prevalence among younger adolescents and recent initiates, and stable or increasing menthol cigarette use over time – despite reductions in non-menthol cigarette use – supports coherence of the evidence on menthol and youth smoking. Plausibility of the relationship between menthol and youth smoking is corroborated by historic industry and related documents on the development and marketing of mentholated cigarettes to youth [50, 51]. The magnitude and statistical significance of the data on the increasing proportion of menthol use and brand preference among youth over time reveals that this is a national phenomenon. Additional analyses exclude misclassification and socioeconomic status as explanations for the high prevalence of menthol cigarette use among youth.

Dependence

Youth menthol smokers report greater levels of nicotine dependence than youth non-menthol smokers

Of eight studies assessing nicotine dependence among youth [28, 34, 36, 60–64], five demonstrate significantly higher endorsement of dependence symptoms among menthol smokers compared to non-menthol smokers [28, 34, 36, 60, 62]. Of the three studies using NYTS data from 2000, 2002, 2004, and 2006, two [28, 62] report that young menthol cigarette users have a significantly shorter first time-to-cigarette after waking, which is a hallmark of nicotine dependence [65], after adjusting for gender, race, grade, number of days smoked in the past 30 days and number of cigarettes smoked per day. These two studies also show greater endorsement of withdrawal symptoms among youth menthol smokers, particularly, craving [28, 62], and feeling irritable or restless after not smoking for a few hours [28]; these findings also adjusted for gender, race, grade, number of

days smoked in the past 30 days and number of cigarettes smoked per day. This is consistent with the third NYTS paper that highlights higher than median scores on a nicotine dependence scale among youth menthol compared to non-menthol smokers, controlling for age, gender, race/ethnicity, and smoking behavior (i.e., length, frequency, and level of smoking) [34]. A smaller cross-sectional study of adolescents recruited for a cessation treatment study by Collins and Moolchan also reported a greater proportion of adolescent menthol smokers smoking within five minutes of waking compared to non-menthol smokers [60]. Further, a national longitudinal study of U.S. adolescents reported that initiating smoking with menthol cigarettes was associated with higher nicotine dependence score, controlling for gender, age, race/ethnicity [36]. Two of the remaining three studies showed no differences in adolescent nicotine dependence in menthol versus non-menthol smokers using the Hooked on Nicotine Checklist [61, 63]. The third study, which used data from four nationally representative samples of youth and adults, found that menthol smokers do not report a higher Heaviness of Smoking Index, compared to non-menthol smokers [64].

Adult menthol smokers report shorter time to first cigarette than non-menthol smokers

Six studies in adults also focus on nicotine dependence among menthol compared to non-menthol smokers by assessing time to first cigarette [6, 66–70]. Two studies in women show that female menthol smokers have a significantly shorter time to first cigarette than non-menthol smokers [66, 68]. A study in a sample of current daily smokers from 1990 to 2001 reported a significantly shorter time to first cigarette among Black menthol users compared to non-menthol users, but this relationship was not present among White smokers [67].

Two studies in adult current smokers published after 2013 found no significant difference in time to first cigarette between menthol and non-menthol cigarette smokers [69, 70]. However, one other study was more aligned with earlier findings. The study of adult daily smokers found that menthol smokers were significantly more likely to report that they would hate to give up the first cigarette in the morning more than any other compared to non-menthol smokers [6].

Summary - dependence

Of fourteen studies published over a fifteen-year period, nine show that menthol smokers report increased nicotine dependence compared to non-menthol smokers [6, 28, 34, 36, 60, 62, 66–68]. The data on dependence among youth menthol smokers are particularly strong, given that four [28, 34, 36, 62] of the five studies showing an association control for a number of important confounders and one of these documents a temporal relationship between initiation with menthol cigarettes and the subsequent development of a higher level of nicotine dependence compared to initiation with a non-menthol cigarette [36]. All six of the studies in adults are cross-sectional, of which four demonstrate a shorter time-to-first cigarette among menthol smokers compared to non-menthol smokers. Three of these four studies examine women [66, 68] and Blacks [67], both groups targeted by tobacco industry marketing [71].

The findings on increased nicotine dependence among youth and adults are particularly important because they highlight a potential mechanism linking experimentation with cigarettes through progression to regular use, and subsequently, reduced cessation among menthol smokers. As a result, it is very likely that a ban on menthol in cigarettes would reduce nicotine dependence at the population level, thus having tremendous impacts on both initiation and cessation of cigarette use.

Cessation

In examining evidence on the relationship between menthol cigarette use and smoking cessation, we focused on studies that used cessation measures in addition to measures of quit attempts or intention to quit; as a result, there are several studies using intention to quit or quit attempts as the primary outcome that are not addressed in detail in this section [42, 72–74].

National cross-sectional studies

Five studies in the Tobacco Use Supplement to the Current Population Survey (TUS-CPS) measure cessation outcomes beyond quit attempts or intention to quit. Three studies [75–77] demonstrate that menthol users are less successful in quitting than non-menthol users despite increased quit attempts or intentions to quit. One of these studies found that past-year quit attempts were significantly increased in menthol compared to non-menthol smokers, but short-term (greater than 3 months and less than one year) and longer-term (greater than 3 months and less than five years) quit rates were significantly lower among those who smoke menthol cigarettes as compared to non-menthol cigarettes [75]. One study exploring cessation by race/ethnicity reported that non-Hispanic white, African American, and Puerto Rican menthol smokers were less likely to have quit smoking in the past five years compared to their non-menthol smoking counterparts [76]. Another study examining cessation by racial/ethnic groups found that cessation of at least six months was significantly reduced by 52% to 78% in African American, Hispanic/Latino, Asian American/Pacific Islander, and non-Hispanic white menthol smokers compared to non-menthol smokers [77]. Two studies found no

difference in cessation outcomes among menthol and non-menthol smokers [78, 79]. One study examined quitting behaviors among daily menthol and non-menthol smokers with similar cigarette consumption patterns and found no difference in quit attempts or greater than two-week abstinence by menthol status [78]. One study published after 2013 among current and past-year smokers (recent active smokers) found no difference in quit intention, quit attempts, or quit rate among menthol compared to non-menthol smokers [79].

Studies of adult smokers in the 2005 National Health Interview Survey (NHIS) Cancer Control Supplement corroborate the findings for reduced cessation among racial and ethnic subgroups from the TUS-CPS data. These studies report increased quit attempts in the past year among menthol compared to non-menthol smokers [80, 81] but significantly reduced cessation among African-American [80, 82] and Hispanic menthol smokers compared to non-menthol smokers [82]. One of these studies [82] also collapsed Hispanic and African-American smokers into one category and reported a statistically significant decrease of 45% in the odds of cessation among non-White menthol smokers compared to non-White non-menthol smokers. One study assessing quit duration as a cessation measure showed that there was a significant increase in quit duration among white female menthol smokers compared to white female non-menthol smokers, but no statistically significant differences among the other five demographic groups [81].

A more recent study examined the association between menthol use and the likelihood of being a former versus current smoker using data from the TUS-CPS (2010/11) and the NHIS (2005 and 2010). Analyses of the TUS-CPS found a statistically significant inverse association between menthol use and having quit smoking, but this was not reported when using the NHIS [83].

Community-based studies

One study from 1981 to 1999 in a hospital-based study of 19,545 current and former smokers showed that Black and White menthol users were significantly less likely to be former smokers compared to non-menthol users, but was no longer significant after controlling for age, sex, education, case–control status, years of smoking, and cigarettes per day [84]. Another study of 480 inner-city adult current smokers reported that menthol smokers reported a more recent quit attempt compared to non-menthol smokers (12 vs. 24 days; $p = 0.047$), but there was no difference in most recent or longest ever duration of abstinence [85]. A third study of 928 female smokers screened for a smoking cessation study reported that fewer menthol smokers reported a previous quit attempt of greater than 90 days compared to non-menthol smokers [68]. In a hospital-based study of 1067 adult smokers there was no significant effect of menthol use on motivation to quit and confidence to quit when adjusting for age, sex, race, income, education, and tobacco dependence [86].

Cohort studies

Of eight cohort studies examining differences in smoking cessation [87–94], three reported significantly lower quit rates among menthol smokers compared to non-menthol smokers at follow-up [90, 91, 94]. The study by Pletcher et al. [90] showed a 37% reduction in the odds of sustained cessation adjusted for age, sex, and ethnicity, but this result did not retain statistical significance after additional adjustment for educational level, marital status, employment, and health insurance status. The second study by Gandhi et al. [91] reported significant reductions in the odds of cessation of 68% and 57% among African American and Latino menthol smokers, respectively, at 4-week follow-up and a decrease of 52% in African Americans at 6-month follow-up, controlling for age in years, education, gender, employment status, type of insurance, cigarettes per day, age smoked for first time, awaken at night to smoke, time to use first cigarette of day, previous attempts to quit smoking, and the presence of a disease caused or aggravated by smoking. The third study published in 2014 by Lewis et al. [94] found menthol smokers to be less likely to quit (17.1% in African Americans, 24.2% in non-African Americans) than non-menthol smokers (21.9% in African Americans, 29.4% in non-African Americans).

Two additional studies by Reitzel et al. showed significant reductions in cessation in White menthol smokers, adjusted for covariates including age, partner status, income, and education; one for long-term (approximately 6 months) continuous abstinence in pregnant smokers [87] and a more recent publication for short-term abstinence in adult daily smokers [93]. Three other studies did not show a difference in abstinence at follow-up in menthol compared to non-menthol smokers [88, 89, 92]. The COMMIT study [89], which did not show a difference in cessation between menthol and non-menthol smokers, surveyed smokers in selected communities in the U.S. and Canada between 1988 and 1993. Possible reasons for the mixed results across the three studies include population sampling and recentness of the data.

Of the five studies showing a statistically significant difference in cessation by menthol smoking status, one [91] was conducted in a cessation clinic population from 2001 to 2005, one [90] in a large cohort of healthy young African American and European American men and women in four US cities from 1985 through 2000, one [94] in a sample of nationally representative U.S.

households from 2004 to 2009, and two others in community-based samples in Houston, Texas between 2004 and 2008 [87, 93]. The two other studies showing no effect of menthol on cessation were conducted in southern States from 2002 to 2009 [92] and in Minnesota between 2009 and 2011 [88]. We would note that the cigarette market has undergone dramatic changes over the past 10–15 years, including the introduction of a number of new menthol brands. Because of the differences in menthol levels and effects among brands [95], it is important to rely on the most recent data that reflects products currently on the market. Accordingly, we consider the COMMIT study less relevant to the question of adult cessation in the context of an FDA ban on menthol, as it includes older data. Additional weight should also be given to the cohort study conducted in a cessation clinic [91], as it reflects smokers who are motivated to quit and thus, controls for confounding by cessation cognitions and intention to quit.

Randomized controlled trials

Seven randomized controlled trials [96–102] in populations motivated to quit smoking explored the impact of menthol cigarette use on cessation. One study testing the impact of a phone survey and provider progress notes on smoking cessation among VA patients showed no difference six months after the intervention in smokers who had not smoked in the past seven days [96]. An additional study among stimulant-dependent adults found no significant association between cigarette type and smoking cessation [100]. However, five studies [97–99, 101, 102] testing the effect of pharmacotherapies and behavioral therapies on smoking cessation reported significantly reduced cessation among menthol smokers compared to non-menthol smokers. While results in two of these studies [97, 98] maintained a consistent direction (i.e., menthol users had reduced cessation compared to non-menthol users), they were not statistically significant across all follow-up time points; three of these studies reported significantly reduced cessation among menthol smokers at all time points assessed [99, 101, 102]. In the 2003 study by Okuyemi et al. [97], African American menthol smokers had significantly reduced 7-day point prevalence abstinence at 6 weeks (28.3% vs. 41.5%; $p = 0.006$) compared to African American non-menthol smokers, but the difference was not significant at 6 months (21.4% vs. 27.0%; $p = 0.21$). In the 2007 study of African American light smokers (≤ 10 cigarettes per day) by Okuyemi et al. [98], menthol smokers had significantly reduced 7-day point prevalence abstinence at 26 weeks (11.2% vs. 18.8%; $p = 0.015$) compared to non-menthol smokers, but not at 8 weeks (22.6% vs. 26.8%; $p = 0.291$). The 2013 study of African American light smokers by Faseru et al. [99] showed significantly reduced cotinine-verified 7-day point prevalence abstinence among menthol compared to non-menthol smokers at week 7 (14.4% vs. 28.4%; $p = 0.001$) and week 26 (10.0% vs. 20.4%; $p = 0.005$); this study also demonstrated an 84% increased odds of cessation among non-menthol compared to menthol smokers, controlling for treatment, visit attendance, cotinine level, and years smoked. In the 2014 study of treatment–seeking smokers by Rojewski et al., [101] menthol smokers showed significantly reduced 7-day point prevalence abstinence among menthol compared to non-menthol smokers at week 14 (14.8% vs. 33.3%; $p = 0.04$) and week 26 (13% vs. 30%; $p = 0.04$). In the 2014 study by Smith et al. [102], menthol smoking was associated with reduced likelihood of smoking cessation success compared to non-menthol smoking (31% vs. 38%); this study also found that among menthol smokers, African American women were at a particularly high risk of cessation failure compared to white women (17% vs. 35%; OR = 2.63, 95% CI = 1.75,3.96). One major difference in these studies is focus of the cessation intervention.

Five studies [97–99, 101, 102] testing the impact of an individual-level intervention showed reduced cessation among menthol smoking participants while the provider-focused intervention [96] showed no difference in cessation among menthol and non-menthol smoking participants. One individual-level intervention did not show a difference in cessation by menthol use, but that may be attributed to its unique population and the effect of smoking on the participants' other substance use. The studies focusing on individual-level interventions are more relevant to the question of menthol's influence on smoking cessation, as they capture a seven to eight-week window of evidence-based treatment for smoking cessation rather than a single provider visit. The five studies of African American [97–99, 102] and treatment-seeking [101] smokers provide particularly strong evidence of reduced cessation among menthol compared to non-menthol smokers in the face of extended smoking cessation treatment.

Summary - cessation

Four of five studies in the TUS-CPS [75–77, 83] and two of four studies in the Cancer Control Supplement to the National Health Interview Survey [80, 82] that examined quit attempts and additional cessation measures among adult smokers indicate that cessation is reduced in non-Hispanic whites and in racial and ethnic subgroups of menthol smokers compared to non-menthol smokers despite increased quit attempts. These findings demonstrate reasonable consistency and a coherent picture of quit behavior among menthol smokers: menthol smokers make more quit attempts than non-menthol smokers, yet have a more difficult time quitting

successfully. Five [87, 90, 91, 93, 94] of eight cohort studies and five [97–99, 101, 102] of seven randomized controlled trials contribute to the consistency of the findings and the strength of the association between menthol smoking and reduced cessation among adult smokers. Evidence from these ten studies with consistent results also support the temporal relationship between menthol smoking and reduced smoking cessation through their study designs which included longitudinal follow-up of adult smokers. One community-based cross-sectional study also indicates that female menthol smokers have reduced cessation success [68]. One study using consumer purchasing data also shows that African American menthol smokers are less likely to quit smoking [94]. Further, these findings are plausible in light of historic tobacco industry marketing of menthol cigarettes as medicinal, less harmful, or even a more healthful product than non-menthol cigarettes [103–106] and the resulting perceptions among menthol smokers that menthol cigarettes may be less risky than regular cigarettes [107]. These population-based cross-sectional, cohort, and randomized controlled studies, which showed strong and consistent associations between menthol use and reduced smoking cessation, were high quality, and addressed bias and confounding through regression adjustment or randomization.

Discussion

Studies published after 2013 bolster and augment earlier findings regarding the deleterious relationship between menthol cigarette use, youth smoking initiation, and nicotine dependence. The strength and consistency of the associations in these studies confirm the conclusions of previous studies and provide additional support for the conclusion that an FDA ban on menthol tobacco products would benefit public health.

Limitations of this review include restriction of the search to articles published in PubMed and lack of multiple independent coders which may have biased the way that studies were included and characterized. Additionally, brand names (e.g., Newport) were not included in the search strategy, which may have resulted in not capturing all relevant studies.

Studies of the cigarette marketplace confirm menthol's growing market share. The proportion of menthol variants of popular brands like Pall Mall, Camel, and Marlboro rose, at times substantially, between 2004 and 2013 [108]. Newport, the leading menthol brand, increased its market share from 7.23% in 2002 to 10.89% in 2013 [108] and has continued to grow following Reynolds American's 2015 acquisition of Lorillard Tobacco Company [109], from 13% to 13.6% in the fourth quarter of 2015 alone [110]. More recently, Newport launched new promotional efforts aimed at recruiting young adults to smoke cigarettes [111].

Analyses of the NSDUH highlight that among past 30-day smokers, the proportion of menthol cigarette users was 35% in 2008–2010 and increased significantly to 39% in 2012–2014 [14]. These increases were observed in young adults aged 18–25, as well as adults aged 26–34 and 35–49 and over this time period, youth smokers aged 12–17 remained the group with the highest prevalence of menthol cigarette use (54%) [14]. The findings of this review, in concert with recent evidence on the increasing presence of menthol in the cigarette market, underscores the urgent need for policy action to ban the sale, marketing, or presence of menthol as a characterizing flavor in cigarettes at the national, state, and local levels.

Conclusions

This review of the scientific evidence demonstrates that there is more than sufficient evidence to establish a positive relationship between menthol cigarettes and (1) increased youth smoking initiation, (2) increased nicotine dependence, and (3) decreased adult cessation. The weight of the evidence from studies published through 2017 supports that removal of menthol from cigarettes would, in the words of the Tobacco Control Act, decrease the likelihood that those who do not use tobacco products will start using such products and increase the likelihood that existing users of tobacco products will stop using such products.

Additional files

Additional file 1: Table S1. Characteristics of included studies on menthol cigarettes and smoking initiation. Table including Reference, Study Design, Setting, Study Population, Sample Size, and Outcomes (DOCX 67 kb)

Additional file 2: Table S2. Characteristics of included studies on menthol cigarettes and nicotine dependence. Table including Reference, Study Design, Setting, Study Population, Sample Size, and Outcomes (DOCX 33 kb)

Additional file 3: Table S3. Characteristics of included studies on menthol cigarettes and smoking cessation. Table including Reference, Study Design, Setting, Study Population, Sample Size, and Outcomes (DOCX 57 kb)

Abbreviations

FDA: Food and Drug Administration; MTF: Monitoring the Future; NHANES: National Health and Nutrition Examination Survey; NHIS: National Health Interview Survey; NSDUH: National Survey on Drug Use and Health; NYSCS: National Youth Smoking Cessation Survey; NYTS: National Youth Tobacco Survey; PATH: Population Assessment of Tobacco and Health; TPSAC: Tobacco Product Scientific Advisory Committee; TUS-CPS: Tobacco Use Supplement to the Current Population Survey

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Availability of data and materials
All data generated or analysed during this study are included in this published article and its Additional files.

Authors' contributions
AV conceptualized the review, conducted the initial search of the literature, and drafted the manuscript. AV and LC conducted additional searches of the literature and updated the manuscript. SG, RN, and DA provided guidance throughout the process and critical revisions on the manuscript drafts. All authors read and approved the final manuscript.

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The authors declare that they have no competing interests.

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Author details
[1]The Schroeder Institute for Tobacco Research and Policy Studies at Truth Initiative, Washington, DC, USA. [2]Vermont Center on Behavior and Health, Department of Psychiatry, University of Vermont, Burlington, VT, USA. [3]Department of Health, Behavior and Society, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, USA. [4]Department of Oncology, Georgetown University Medical Center, Lombardi Comprehensive Cancer Center, Washington, DC, USA. [5]Public Policy, Truth Initiative, Washington, DC, USA.

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Effects of Nicotine and Mint/Menthol on Genes and Disease Risks

Cynthia J Grondin, PhD Department of Biology, North Carolina State University, Raleigh, NC

Currently, e-cigarettes are being marketed as playful, harmless recreational devices, but data are lacking on the veracity of this harmlessness. We have a tool, the Comparative Toxicogenomics Database (CTD; http://ctdbase.org), that can look at the known constituents and give some insight into whether or not they are really safe. CTD is a public scientific resource, funded by the National Institutes of Health, wherein PhD-level scientists manually capture data on chemicals, genes and diseases and integrate this data with select public data sets to help determine the molecular mechanisms underlying chemically-influenced diseases. CTD currently describes over 40 million relationships among chemicals, genes, phenotypes, molecular pathways and diseases.

Within CTD (1), Nicotine has been shown to interact with over 500 unique human genes in more than 1,200 types of interactions affecting the expression and modification of genetic material. Though Nicotine has not yet been confirmed as a complete carcinogen (capable of initiating, promoting and progressing tumors), CTD data indicate that it is involved in over 300 types of biological events, of which 70% are related to cell proliferation and cell death, events directly related to cancer. In addition, Nicotine is directly associated with 20 different types of cancer, and indirectly associated with over 250 types of cancer, though associations do not necessarily indicate causation. In studies of young adults, Nicotine has been shown to affect mental health, increasing depression, panic disorder, and the inability to experience pleasure (2), as well as cause sexual dysfunction (3). Overall, CTD reveals that Nicotine plays a role in at least 215 different diseases, such as addiction disorders, cardiovascular diseases and respiratory tract diseases; it has inferred relationships to over 1,800 diseases.

Despite the limited number of chemicals listed on the packaging of vaping products, numerous chemicals in addition to Nicotine have been detected in e-liquids, e-liquid flavorings and e-vapors. Mint and menthol e-cigarette products, specifically, have been shown to contain the following chemicals: 3-hexen-1-ol, Acetone, acrolein, Alpha-terpineol, Benzaldehyde, Benzoic acid, benzyl acetate, benzyl alcohol, cyclotene, decanaldehyde, ethyl maltol, ethyl vanillin, formaldehyde, glycerol, isoamyl acetate, limonene, linalool, Menthol, Menthone, Methyl acetate, Methyl salicylate, Propylene glycol, and vanillin. These chemicals interact with over 4,700 unique genes in multiple ways, including changing gene expression, protein activity, and mutating genetic material. This set of chemicals, when used as an input data set in CTD's Set Analyzer tool, yields 840 diseases that are statistically enriched among the genes that interact with these chemicals. These diseases include cancer, nervous system diseases, cardiovascular diseases, metabolic diseases, urogenital diseases, and mental disorders. Specific chemicals in this data set, such as formaldehyde, are classified by the EPA as a 'probable human carcinogen', and have been shown to cause an increased risk of cancers such as myeloid leukemia.

Collectively, there is extensive evidence that the chemicals in e-liquids and e-vapors are NOT harmless. E-cigarette flavorings, such as mint and menthol, are merely masking the harmful nature of these products, while adding to the toxic chemical fingerprint of the e-liquids.

1. Curated [chemical-gene interactions|chemical-disease|gene-disease] data were retrieved from the Comparative Toxicogenomics Database (CTD), MDI Biological Laboratory, Salisbury Cove, Maine, and NC State University, Raleigh, North Carolina. World Wide Web (URL: http://ctdbase.org/). [December, 2018].
2. J Psychiatr Res. 2016 Feb; 73: 71–78
3. J Sex Med. 2008 Jan;5(1):110-21

Town of Arlington, Massachusetts

Tobacco Update - D.J. Wilson

ATTACHMENTS:

	Type	File Name	Description
	Reference Material	Tobacco_Update_Memo.pdf	Tobacco Update Memo

Town of Arlington
Department of Health and Human Services
Office of the Board of Health
27 Maple Street
Arlington, MA 02476

Tel: (781) 316-3170
Fax: (781) 316-3175

To: Board of Health
From: Padraig Martin
Date: April 5, 2019
RE: Tobacco Update

In December, 2018, the Somerville Board of Health amended their existing regulation "Restricting the Sale of Tobacco Products" with an effective date of April 1, 2019. The regulation included the following amendments:

- Removed menthol, mint, and wintergreen from the exempted section of the characterizing flavor definition and moved it to the list of flavors that are considered flavored tobacco
- Limiting the sale of e-cigarettes to adult-only retail tobacco stores
- Re-categorized tobacco as a flavored product for e-cigarettes

These amendments affectively restrict the sale of e-cigarettes and flavored tobacco (including menthol) to adult-only retailers. D.J. Wilson, Tobacco Control Director/Public Health Liaison for the Massachusetts Municipal Association has offered to provide an update on Somerville's tobacco amendments and well as the legal challenges they are facing.

Town of Arlington, Massachusetts

Novus Agenda- Adam Kurowski

Town of Arlington, Massachusetts

Keeping of Hens - 4 Alpine Street

ATTACHMENTS:

	Type	File Name	Description
	Reference Material	4_Alpine_Chickens_BOH.pdf	4 Alpine Chickens

Town of Arlington
Department of Health and Human Services
Office of the Board of Health
27 Maple Street
Arlington, MA 02476

Tel: (781) 316-3170
Fax: (781) 316-3175

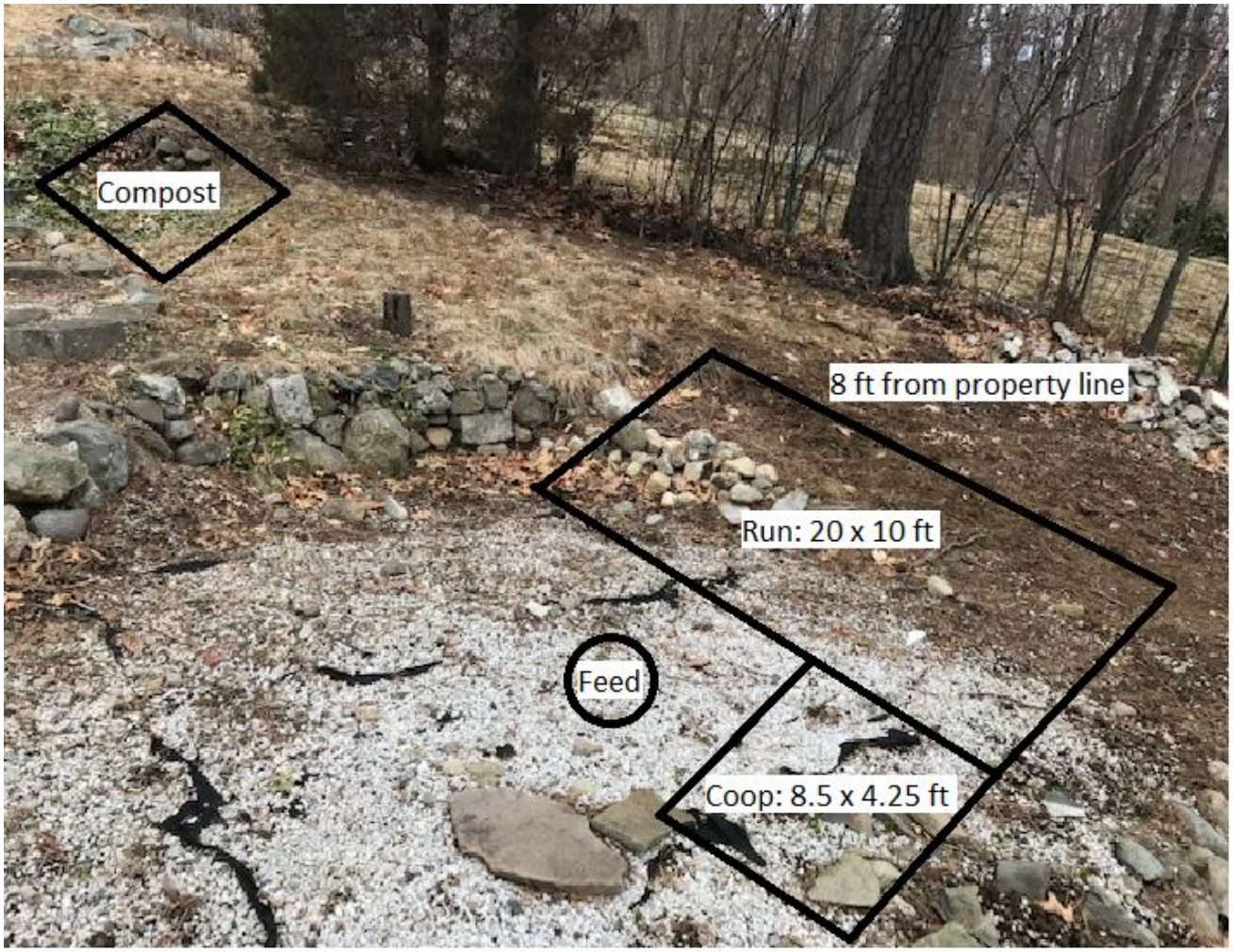
MEMO

To: Board of Health Members
From: Kylee Sullivan, Health Compliance Officer
Date: April 2, 2019
RE: Keeping of Hens Request at 4 Alpine Street

John Kozma submitted a Keeping of Hens Site Plan Review Application for 4 Alpine Street on January 28, 2019. The property's dwelling is a single-family structure owned by the applicant. The property owner plans to keep six hens on this 8,920 Sq Ft lot in the Heights. The property has three abutters. Two abutters were notified by the applicant of his intent to keep hens via certified mail and the other was notified by a hand-delivered letter. The letters notified the abutters of a Board of Health hearing to be held on April 10, 2019 at 5:30pm. To date, no neighbors have raised concerns regarding the close proximity of the coop to their property. Please note, one of the abutters recently passed away and as a result notification was sent to the abutter's estate.

The attached site plan provided by the applicant illustrates that all distance requirements set forth in the Town Bylaw are satisfied; the coop's proposed location does not violate the six feet minimum distance from all property lines. The materials submitted included all necessary components of the site plan application. A site walk was conducted on March 21, 2019 to verify the proposed location of the coop/pen and the structure. If the application is approved, no final permit will be granted until an inspection of the finished coop confirms the build-out matches the design specifications.

4 Alpine St – Site Visit Diagram



DEPARTMENT OF HEALTH AND HUMAN SERVICES
OFFICE OF THE BOARD OF HEALTH

Town of Arlington

27 Maple Street
Arlington, Massachusetts 02476

KEEPING OF HENS SITE PLAN REVIEW APPLICATION

These guidelines are not final requirements. The Board of Health may require additional information based on the type and location of operation.

Plan Review Fee: $150.00 (checks made payable to: Town of Arlington)

For office use only: Date/time application received: 1/28/2019 Received by: K. Sullivan (BOH Staff)

APPLICANT NAME: John Kozma and Emily Dertz

APPLICANTADDRESS: 4 Alpine Street, Arlington Massachusetts 02474

CONTACT NUMBER: (617)480-3484

CONTACT EMAIL: john.kozma@gmail.com

Keeping of Hens Application Process Summary

1. Submit this Site Plan Review Application to Health Department with check for $150.
2. Health Department reviews application and conducts site walk.
3. After plan review and site walk, a meeting date with the Board of Health is set. The applicant will notify all abutters at least 14 days but no more than 30 days prior to the hearing, of their intent to keep hens and the BOH hearing date, time and location. Abutters shall include both owners and tenants. The applicant shall provide verification of notification in the form of a signed letter or USPS receipt that a certified letter has been received.
4. A meeting with the Board of Health is held and a decision made to approve or deny application based upon all requirements set forth in town bylaw.
5. Once approved by the Board of Health, the applicant is required to submit an Application for Annual Permit to Keep Hens to the Health Department with a check for $100 and the applicant will be permitted to construct coop and pen.
6. A final inspection is conducted once coop and pen have been constructed and final approval to keep hens is granted.
7. An annual permit to keep hens is required through the Health Department expiring April 1st of every year. A renewal permit must be obtained. Permit holders that fail to renew their keeping of hens permit prior to April 1st are subject to a $100 reinstatement fee.
8. An annual inspection will be conducted by the Health Department. Failure to meet requirements set forth in the town bylaws may result in a re-inspection fee of $100 and a hearing with the Board of Health to determine whether permit should be revoked, suspended, or subject to further conditions.

CIRCLE/ANSWER THE FOLLOWING QUESTIONS:

Is the applicant the sole owner of the property where hens will be kept? YES/NO
If no, please provide signed written statements from all property owners granting permission for the keeping of hens.

What is the size of the property lot in square feet? 8, 712 Square Feet

I. HENHOUSE / PEN:

1. Location

a. Will the henhouse/pen enclosure be in the rear yard of the property? YES/NO

b. Will the henhouse/pen enclosure be at least six (6) feet from all property lines? YES/NO

c. Will the henhouse/pen enclosure be at least 25 feet from existing residences on adjacent lots? YES/NO

d. Will the henhouse/pen enclosure be located at least 200 feet from the high water mark of any known source of drinking water supply or any tributary thereof, and at least 50 feet from any well? YES/NO

e. Will the henhouse/pen enclosure conform to all relevant property setbacks for accessory structures as specified in sections 6.18 and 8.23 of the zoning bylaws? YES/NO

f. Will the henhouse/pen enclosure interfere with any utility or other feature of the property that needs suitable access? YES/NO

g. Will the henhouse/pen enclosure be located in a well-drained area that does not discharge to a public way or neighbor's property? YES/NO

h. Please provide a certified plot plan depicting all of the following: all structures on property, all structures on abutting properties, and proposed locations of the henhouse/pen enclosure, composting/manure storage and food storage.

2. Construction

a. Will the henhouse enclosure provide a minimum interior floor surface of at least two (2) square feet per bird? YES/NO

b. Will the pen enclosure provide a minimum ground surface of at least five (5) square feet per bird? YES/NO

c. Will the henhouse/pen enclosure be securely constructed in a manner that excludes predators and pests, including those that fly, burrow and reach? YES/NO

d. Will the pen enclosure have a predator and pest proof material across the top? YES/NO

e. Will the henhouse provide protection from the elements as needed? YES/NO

f. Will the henhouse be constructed in such a manner and with such materials that allow for effective weekly cleaning? YES/NO

g. Please provide a separate detailed description of the henhouse/ pen enclosure, including square footages and photographs if possible.

See attached description, plan, and photographs.

3. Maintenance

a. Will the feed be securely stored in a rodent and pest proof container? YES/NO

b. Will the feed leftover from feeding remain in an area accessible to rodents and pests past dusk? YES/NO

c. If weather is too cold, or composting is otherwise not possible, will there be a sealable container for waste to be stored until disposal? YES/NO

d. If composting is possible, how and where will waste be composted with carbonaceous material such as hay, bedding, or leaves? Please identify composting/ manure storage location on required certified plot plan.

See attached form.

e. What measures will be taken to prevent the buildup of pests or rodent populations due to the presence of hens on the property?

See attached form.

f. Please provide a separate detailed written maintenance plan describing the following: cleaning practices and schedule for the henhouse/pen enclosure and feed and water containers, which anti-bacterial/viral cleaning solution will be used, which bedding material will be used in the henhouse and at which depth it will be provided, how frequently the bedding material will be composted, and any other appropriate nuisance (odor & noise) prevention measures that will be taken.

II. HENS:

1. Hen keeper

a. Will the hen keeper be taking, or has the hen keeper taken, a class in keeping hens? (YES/NO)
If yes, please provide a copy of a certificate of completion from a hen-keeping course.

b. Will there be a knowledgeable person in charge to care for hens during vacations or extended leaves? (YES/NO)

2. Source

a. What type of hens and how many hens will you be keeping?
The plan will be for 4-6 hens of either Buff Orpington or Rhode Island Red breeds.

b. Will the hens be acquired from S. pullorum clean sources from National Poultry Improvement Plan (NPIP) participants? (YES/NO)

c. Where will the hens be acquired from and what documentation will be provided?
Hens will be acquired from Great Road Farm & Garden in Littleton, MA. Documentation that the chicks are from an NPIP certified breeder will be requested.

3. Health & Disease Concerns

a. Will the hens be vaccinated from any communicable diseases? YES/(NO)
If yes, from what?_____

b. Will newly acquired hens be isolated from healthy resident birds? YES/(NO)
If yes, where and for how long?_____

c. Will the hens be separated from wild migratory fowl at all times? (YES/NO)

d. What will be done with a hen if it dies? See attached form

To complete this application the following materials must be provided:

- Copy of list of property abutters obtained from Town of Arlington Assessors Office
- If applicant is not sole property owner, signed written statements from all property owners granting permission for the keeping of hens
- Plot plan drawn to scale depicting all of the following: all structures on property, all structures on abutting properties, proposed locations of the henhouse/pen enclosure, composting/manure storage and food storage, and distance of henhouse and pen from property lines and existing adjacent residences. The BOH reserves the right to require the applicant to provide a plot plan certified by a professional engineer or land surveyor to resolve any questions or disputes relating to the conformance of the placement of the henhouse and pen with any and all relevant property setbacks and zoning bylaw requirements.
- Written maintenance plan and description of henhouse/pen enclosure
- Copy of certificate of completion from a hen-keeping course if applicable
- After a BOH hearing date has been set, submit a copy of signed letter or receipt from USPS that a certified letter has been received by each abutter informing them of your application to keep hens and notifying them of the BOH hearing date, time and location. Abutters include both property owners and tenants.

I have read the town bylaws regarding the keeping of hens and understand the requirements as outlined. I understand failure to comply with the requirements of the town bylaws and failure to prevent a public health nuisance may result in revocation of my Permit to Keep Hens.

Signature: _____ Date: 1/28/2019

----------Office use only----------

Board of Health Meeting Date Assigned: _____

I.3(d) - **If composting is possible, how and where will waste be composted with carbonaceous material such as hay, bedding, or leaves? Please identify composting/ manure storage location on required certified plot plan.**

The chicken coop will use either hay or sawdust as a composting material, and the bottom of the coop will be constructed of a composite material to both prevent rotting and enable easy cleaning of the coop on a weekly basis at a minimum. Following the removal of the dirty bedding and manure it will be composted in a three-bin composting system located directly behind the next coop. The compost bins will be rodent proof freestanding bins, that will also be wrapped in metal hardware cloth.

In the three-bin system the bedding/manure is removed from the coop, mixed with carbon rich materials (sawdust, straw, or accumulated autumn leaves) to minimize odor, and allowed to accumulate in enclosed Bin #1 for 30 days. This is the primary heating stage during which the compost will not be disturbed and should reach temperatures high enough to kill harmful microbes. During the 30 day heat stage, used bedding is added to Bin #2. At the end of the 30 days the heated bedding from Bin #1 is the transferred to Bin #3 for a secondary heating stage, while the bedding from Bin #2 is now allowed to go through the undisturbed primary heating process. After 30 more days the compost in Bin #3 is complete and is either moved to a final destination, or allowed to remain near the compost bin until needed. The contents from Bin #2 are then transferred to Bin #3 and the cycle continues.

Despite the three-bin system eliminating harmful microbes, the resulting compost will not be used on any edible fruits or vegetables.

I.3(e) - **What measures will be taken to prevent the buildup of pests or rodent populations due to the presence of hens on the property?**

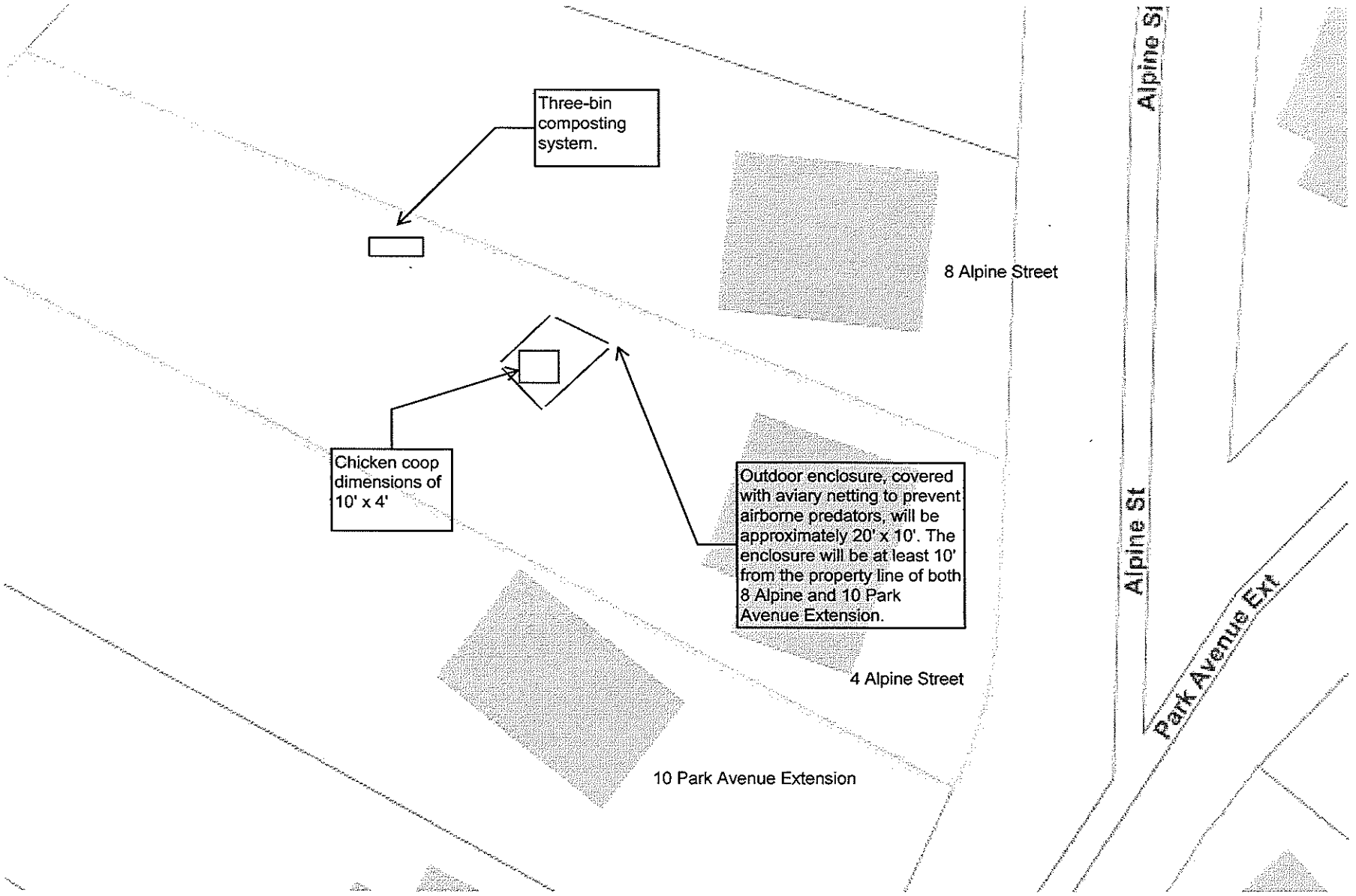
Rodent and other pests will be prevented by both making the chicken enclosure, and especially the coop, inaccessible to them and also quickly cleaning the area to remove any attractants. The first will be accomplished by burying the fencing around the enclosure to a depth of at least 12 inches. The chicken coop that is being built will be constructed of composite materials in all areas that will be susceptible to rotting and raised on concrete pillars to prevent easy access. All doors will be kept properly maintained to prevent access by nocturnal creatures. The coop will also be made rodent proof through the use of lumber and/or metal hardware cloth.

The area around the chicken coop will be kept free of items that will attract pests. As mentioned above, the coop will be cleaned on a weekly basis. Chicken feed and water will also be placed in the morning and removed in the evening to prevent access by pest overnight. The chicken feed will also be stored away from the chicken habitat and stored inside an a metal trash can that will be sealed to prevent access by any animals.

In the event that rodents do appear, particularly rats, baited cage traps will be used to minimize their presence. Under no circumstances will pesticides be used to deal with rodents.

II.3(d) – **What will be done if a hen dies?**

Disposal of a dead hen will vary based on the time of year. In warmer weather (when the ground is neither covered in snow nor frozen) the hen will be buried at the rear of the yard at a depth exceeding two feet. In the colder weather the hen carcass will be wrapped repeatedly in heavy plastic and disposed of in a animal proof garbage can.


Three-bin composting system.
8 Alpine Street
Chicken coop dimensions of 10' x 4'
Outdoor enclosure, covered with aviary netting to prevent airborne predators, will be approximately 20' x 10'. The enclosure will be at least 10' from the property line of both 8 Alpine and 10 Park Avenue Extension.
4 Alpine Street
10 Park Avenue Extension
Alpine St
Alpine St
Park Avenue Ext

4 Alpine St - Keeping of Hens Application

MAINTENANCE PLAN

- A critter proof compost bin will be located next to the chicken coop, outside the coop.
- The entire coop will be cleaned every week, entailing removing all the manure and bedding and adding to the compost bin, and reapplying new bedding.
- Carbon rich material will be used to balance the nitrogen-rich manure. Sawdust and saved autumn leaves will be used to mix with the manure in the compost bin, and sawdust, hay, and/or straw will be used inside the coop as bedding, also helping to minimize odor and keep a proper carbon/nitrogen balance. The depth of bedding will vary slightly, averaging around 2" year round, slightly higher over winter.
- The interior floor of the chicken coop will be made from a polymer linoleum-type material, facilitating cleaning. Each time the coop is cleaned, the coop's base will be cleaned with a diluted bleach solution, along with all the feeders/waterers.
- The waterer device will be heated over winter to prevent freezing. Both the waterer and feeder will be raised on blocks so they're slightly over the ground, helping to minimize spilling. One a week, the feeder and waterer will be cleaned with hot water and a bleach solution.
- Feeding, watering, and egg collection will occur daily.
- All chickens, up to 6 at one time, will be female, excluding any possibility of roosters.

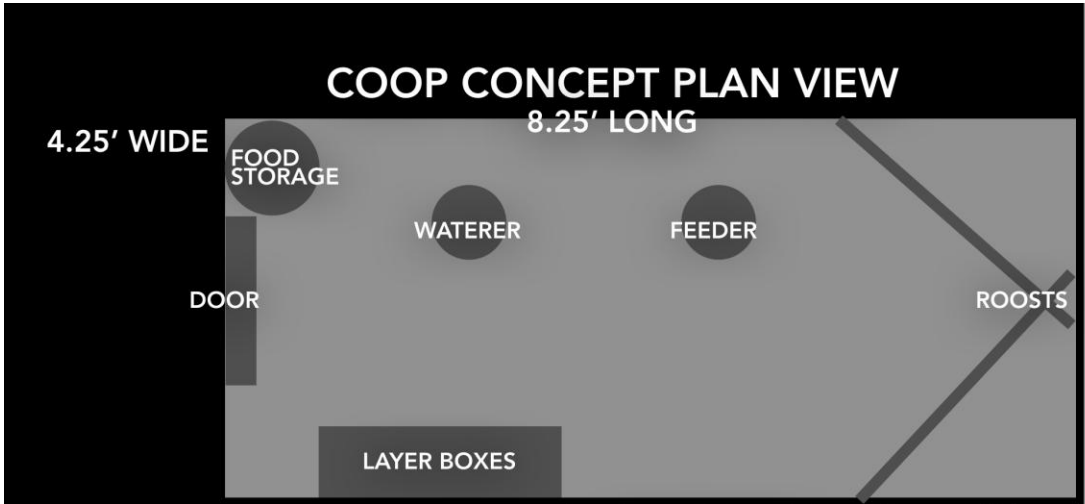
Please note that Marjorie Cabral of 8 Alpine Street is recently deceased, so the life estate has reverted to her son Michael Cabral of 11 Boynton Avenue in Billerica. The property is currently unoccupied, but I'll be providing notice of the hearing to him via certified mail.

COOP SPECIFICATIONS

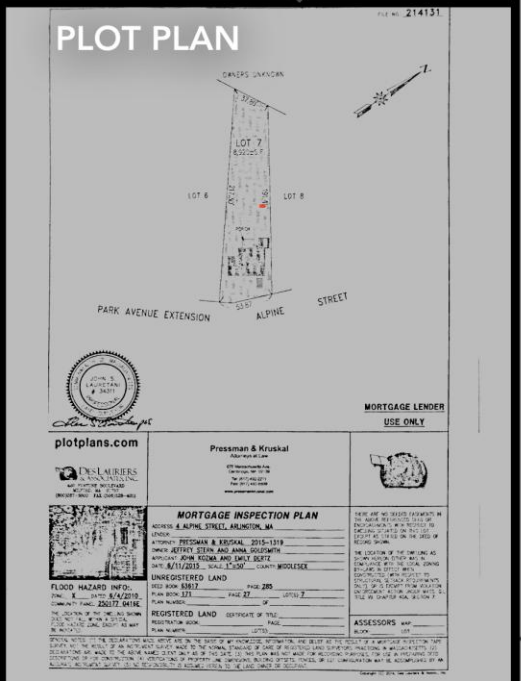
The coop will be built from existing wooden shed that will be retrofitted to include the following:
- The coop will be at least 6' from any adjacent property line.
- The coop will sit on top of concrete blocks for stability. The dimensions of the existing shed are 51" (4.25') wide x 99" (8.25') long, accounting for approximately 35 square feet for the birds. The height from floor to the roof is 53" at the base of the roof, and 99" to the peak of the roof.
- Openings for ventilation will be fortified with hardware cloth, preventing critters, as well a sloped roof preventing entry of water.
- A polymer linoleum-type material for the floor, facilitating cleaning. This lining will extend up the walls about 12" as well, preventing rotting of the floor and making cleaning easier.
- Layer boxes built from lumber or metal will be accessible from outdoors or indoors.
- Roosts built from lumber will be at various heights to allow for chicken comfort, sleeping etc.
- A robust metal trashcan filled with feed may be stored inside the coop, closed with a heavy duty bungee chord.
- Effort will be made to prevent the inside of the coop from getting wet or exposed to extreme wind, while also maximizing adequate ventilation.
- Any potential entry, such as the layer boxes or doors, will be lockable, preventing entry via possums.

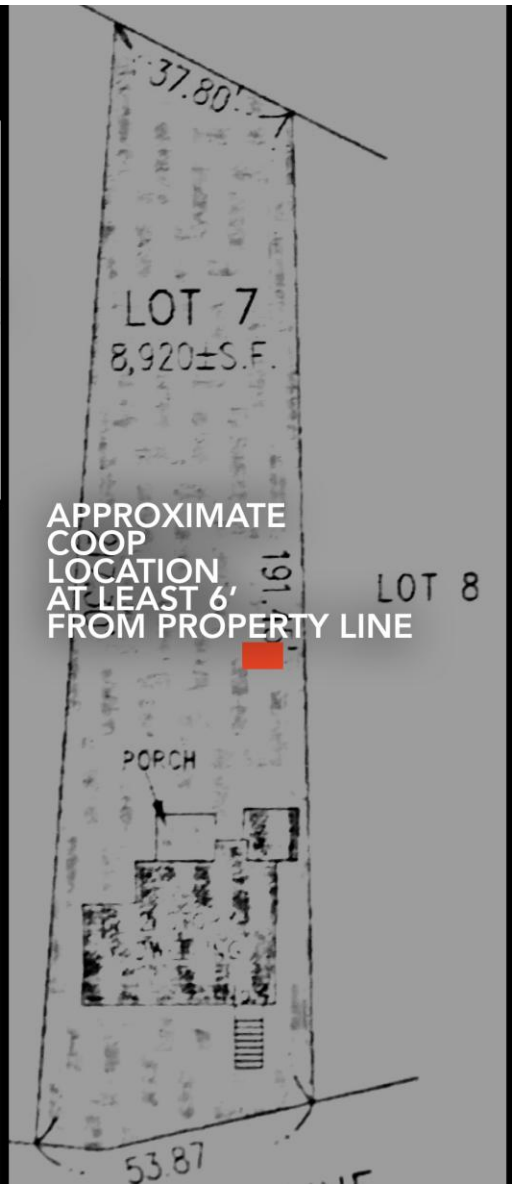
4 Alpine St – Coop Concept

COOP CONCEPT PLAN VIEW



- CRITTER PROOF COMPOST BIN CLOSE BY
- COOP SITS ON CONCRETE BLOCKS
- POLYMER FLOOR; EASY TO CLEAN
- 2+ VENTILATION OPENINGS FORTIFIED WITH HARDWARE CLOTH
- LAYER BOXES ACCESSIBLE FROM OUTSIDE COOP
- FEEDERS AND WATERERS ARE MOVEABLE, SITTING ON SMALL BLOCKS





Office of the
Board of Assessors
Robbins Memorial Town Hall
Arlington, MA 02476
(781) 316-3050
Assessors@town.arlington.ma.us

Abutters List
Date: January 30, 2019

Subject Property Address: 4 ALPINE ST Arlington, MA
Subject Property ID: 84-6-1

Search Distance: Direct Abutters- Keeping of Hens

The Board of Assessors certifies the names and addresses of requested parties in interest, direct abutters to a single parcel.

Board of Assessors

Prop ID: 60-7-1
Prop Location: 14 PARK AVE EXT Arlington, MA
Owner: DONG ANTHONY JIKANG
Co-Owner: ZHANG HUA CHAO
Mailing Address:
14 PARK AVE EXTENSION
ARLINGTON, MA 02474

Prop ID: 84-6-1
Prop Location: 4 ALPINE ST Arlington, MA
Owner: KOZMA JOHN T
Co-Owner: DERTZ EMILY ANN
Mailing Address:
4 ALPINE ST
ARLINGTON, MA 02474

Prop ID: 84-6-2
Prop Location: 8 ALPINE ST Arlington, MA
Owner: CABRAL MARJORIE/LIFE ESTATE
Co-Owner:
Mailing Address:
8 ALPINE ST
ARLINGTON, MA 02474

Prop ID: 84-6-6
Prop Location: 0-LOT ALPINE ST Arlington, MA
Owner: TOWN OF ARLINGTON CON COM
Co-Owner:
Mailing Address:
730 MASS AVE
ARLINGTON, MA 02476

Town of Arlington, Massachusetts

Microblading

ATTACHMENTS:

	Type	File Name	Description
	Reference Material	Microblading_BOH.pdf	Microblading BOH

Town of Arlington
Department of Health and Human Services
Office of the Board of Health
27 Maple Street
Arlington, MA 02476

Tel: (781) 316-3170
Fax: (781) 316-3175

MEMO

To: Board of Health Members

From: Kylee Sullivan, Health Compliance Officer

Date: April 5, 2019

RE: Continued Hearing: Request for Body Art Variance

After the Board of Health meeting on February 6, 2019, I emailed Ms. Kayla Bantz Lucente a notice informing her that the hearing for her body art variance request will be continued to the next meeting on April 10, 2019. On April 4, 2019, Ms. Bantz Lucente informed me that she is working in Medford with a microblading artist to gain experience. I was also informed that no update have been made to her variance request documents. Ms. Bantz Lucente inquired whether it is possible for her to re-submit a variance request once she has the required two years of experience. I notified her that, yes, she may re-submit a variance request once she has the required experienced. As a result of Ms. Bantz Lucente's desire to re-submit her variance request at a later date, I suggested that she withdraw her variance request at this time. However, to date, the Department has not yet received an official decision about the hearing from Ms. Bantz Lucente.

Attached please find a notice of the continued hearing sent to Ms. Bantz Lucente and the most recent emails exchanged regarding this matter.

Town of Arlington
Department of Health and Human Services
Office of the Board of Health
27 Maple Street

Tel: (781) 316-3170
Fax: (781) 316-3175

April 4, 2019

Sent Via Email to: kayla.bantz17@gmail.com
Kayla Bantz Lucente
125 Overlook Road
Arlington, MA 02474

RE: Notice of Hearing Continued - Request for Variance
Town of Arlington Rules and Regulations for Body Art Establishments and Practitioners

Dear Ms. Bantz Lucente,

This letter serves to remind you that your request for a variance was tabled by the Arlington Board of Health at the meeting held on February 6, 2019. As a result, your hearing will be continued at the next meeting on April 10, 2019. The hearing will take place in the ground floor conference room of the Arlington Senior Center located at 27 Maple Street. To date, the Health Department has not received updated documents or additional information for your variance request since the February 6th hearing. Please direct any questions to the undersigned.

Sincerely,

K Sullivan

Kylee Sullivan
Health Compliance Officer
ksullivan@town.arlington.ma.us
(781)-316-3264

cc: Natasha Waden, Director of Public Health

From: "Kylee Sullivan" <KSullivan@town.arlington.ma.us>
To: "Kayla Lucente" <kayla.bantz17@gmail.com>
Date: 04/04/2019 06:09 PM
Subject: Re: Microblading Variance Request Hearing

Hi Kayla,

If you decide to withdraw your variance request, if possible, please let me know by 9:00 AM tomorrow (Friday 4/5) as we need to publicly post the meeting agenda and I'm not sure if we should include your hearing.

Please let me know if you have any questions.

Thank you.
Best,
Kylee
.....
Kylee Sullivan, MPH
Health Compliance Officer
Town of Arlington
27 Maple Street
Arlington, MA 02476
(781) 316-3170

> From: "Kylee Sullivan" <KSullivan@town.arlington.ma.us>
> To: "Kayla Lucente" <kayla.bantz17@gmail.com>
> Date: Thu, 04 Apr 2019 14:01:13 -0400
> Subject: Re: Microblading Variance Request Hearing
>
> Hi Kayla,
>
> Thank you for the update. I'm happy to hear you are working with an artist in Medford! If you would like, you can withdraw your variance request and then the Board would not have to continue your hearing on April 10th. All I would need is an official statement from you stating that you are withdrawing your variance request. Then when you have your experience, you will be able to re-apply at that time.
> Please let me know if you have any questions.
>
> Best,
> Kylee
> .....
> Kylee Sullivan, MPH
> Health Compliance Officer
> Town of Arlington
> 27 Maple Street
> Arlington, MA 02476
> (781) 316-3170
>
> > From: Kayla Lucente <kayla.bantz17@gmail.com>
> > To: Kylee Sullivan <KSullivan@town.arlington.ma.us>
> > Date: Thu, 4 Apr 2019 12:25:47 -0400
> > Subject: Re: Microblading Variance Request Hearing
> >
> > Hi Kylee sorry I have been MIA, I am actually working in Medford with another artist so I can get my experience. Is it worth coming to the hearing ? I haven't done any updating on my forms. I got the job a week after the hearing in feb. can I just reapply when the time comes after I get my experience ?
> >
> > Thanks, Kayla

On Apr 4, 2019, at 11:44 AM, Kylee Sullivan <KSullivan@town.arlington.ma.us> wrote:

Hi Kayla,

I hope this email finds you well. Attached please find a notice regarding your variance request hearing. Please do not hesitate to reach out with any questions or concerns you may have regarding this matter.

Thank you.
Best,
Kylee
.....
Kylee Sullivan, MPH
Health Compliance Officer
Town of Arlington
27 Maple Street
Arlington, MA 02476
(781) 316-3170

<BOH Hearing Notice 4-4-2019.pdf>

Town of Arlington, Massachusetts

Regulation of the Arlington Board of Health Restricting the Sale of Medical Marijuana

ATTACHMENTS:

	Type	File Name	Description
🗋	Reference Material	Draft_Regulation_Restricting_the_Sale_of_Medical_Marijuana_2019_V3.pdf	Draft Regulation Restricting the Sale of Medical Marijuana

Town of Arlington
Department of Health and Human Services
Office of the Board of Health
27 Maple Street
Arlington, MA 02476
Tel: (781) 316-3170
Fax: (781) 316-3175

Regulation of the Arlington Board of Health Restricting the Sale of Medical Marijuana

A. Statement of Purpose:

Whereas the citizens of Massachusetts voted in November of 2012 to declare there should be no punishment under state law for Qualifying Patients and health care professionals, Personal Caregivers for patients, or Registered Marijuana Dispensary Agents for the medical use of marijuana.

Whereas the Town of Arlington aims to abide by the aim of this law and ensure that Registered Marijuana Dispensaries abide by further regulations to ensure the public health and public safety of our residents.

Now, therefore it is the intention of the Town of Arlington to regulate the cultivation and sale of medical marijuana.

B. Authority:

This regulation is promulgated pursuant to the authority granted to the Arlington Board of Health by Massachusetts General Laws Chapter 111, Section 31 that "Boards of Health may make reasonable health regulations".

C. Definitions:

For the purpose of this regulation, the following words shall have the following meanings. Terms not herein defined shall be used as defined in 935 CMR 501.000: MEDICAL USE OF MARIJUANA.

Blunt Wrap: Any tobacco product manufactured or packaged as a wrap or as a hollow tube made wholly or in part from tobacco that is designed or intended to be filled by the consumer with loose tobacco or other fillers.

Board of Health: The Town of Arlington Board of Health and any of its authorized agents and representatives.

Business Agent: An individual who has been designated by the owner or operator of any establishment to be the manager or otherwise in charge of said establishment.

Card Holder: A Registered Qualifying Patient, a Personal Caregiver, or a Dispensary Agent of a Registered Marijuana Dispensary who has been issued and possesses a valid Registration Card.

Cultivation Site: The building, structure, enclosed space, area, room or group of rooms, and associated equipment and fixtures, where the cultivation of marijuana occurs pursuant only to a Hardship Cultivation Registration. This shall not refer to a site or facility where the cultivation of marijuana by a Registered

Marijuana Dispensary occurs, which shall be considered a Registered Marijuana Dispensary requiring a Permit to Operate a Medical Marijuana Dispensary.

Dispensary Agent: A board member, director, employee, executive, manager, or volunteer of a Registered Marijuana Dispensary, who is at least 21 years of age and who has received approval from the state under 935 CMR 501.030. Employee includes a consultant or contractor who provides on-site services to a Registered Marijuana Dispensary related to the cultivation, harvesting, preparation, packaging, storage, testing, or dispensing of marijuana.

Dispensary Agent Permit: A permit issued by the Board of Health, expiring on December 31st and to be renewed annually, which permits an eligible person to be employed by a Registered Marijuana Dispensary.

Dispensary Agent Permit Holder: Any employee at a Registered Marijuana Dispensary who applies for and receives a Dispensary Agent Permit.

E-Cigarette: Any electronic nicotine delivery product composed of a mouthpiece, heating element, battery and/or electronic circuits that provides a vapor of liquid nicotine to the user, or relies on vaporization of solid nicotine or any liquid. This term shall include such devices whether they are manufactured as e-cigarettes, e-cigars, e-pipes or under any other product name.

Employee: Any individual who performs services for an employer.

Employer: Any individual, partnership, association, corporation, trust or other organized group of individuals that uses the services of one (1) or more employees.

Hardship Cultivation Permit: A permit issued by the Board of Health, expiring on December 31st and to be renewed annually, which permits a Personal Caregiver or a Registered Qualifying Patient to cultivate medical marijuana at a cultivation site within the Town of Arlington.

Hardship Cultivation Permit Holder: Any Personal Caregiver or Registered Qualifying Patient engaged in the hardship cultivation of marijuana who applies for and receives a Hardship Cultivation Permit.

Hardship Cultivation Registration: A registration issued to a Registered Qualifying Patient under the requirements of 935 CMR 501.035.

Limited Access Area: A building, room, or other indoor or outdoor area on the registered premises of a Registered Marijuana Dispensary where marijuana, MIPs, or marijuana by-products are cultivated, stored, weighed, packaged, processed, or disposed, under control of a Registered Marijuana Dispensary, with access limited to only those Dispensary Agents designated by the Registered Marijuana Dispensary.

Marijuana: All parts of the plant Cannabis sativa L., whether growing or not; the seeds thereof; and resin extracted from any part of the plant; and every compound, manufacture, salt, derivative, mixture, or preparation of the plant, its seeds or resin. It does not include the mature stalks of the plant, fiber produced from the stalks, oil, or cake made from the seeds of the plant, any other compound, manufacture, salt, derivative, mixture, or preparation of the mature stalks, except the resin extracted therefrom, fiber, oil, or cake or the sterilized seed of the plant which is incapable of germination. The term also includes Marijuana-Infused Products (MIPs) except where the context clearly indicates otherwise.

Marijuana-Infused Product (MIP): A product infused with marijuana that is intended for use or consumption, including but not limited to edible products, ointments, aerosols, oils, and tinctures. These products, when created or sold by a Registered Marijuana Dispensary, shall not be considered a food or a drug as defined in M.G.L. c. 94, s. 1.

Nicotine Delivery Product: Any manufactured article or product made wholly or in part of a tobacco substitute or containing nicotine that is expected or intended for human consumption, but not including a product approved by the United States Food and Drug Administration for sale as a tobacco use cessation or harm reduction product or for other medical purposes and which is being marketed and sold solely for that approved purpose. Nicotine delivery products include, but are not limited to, e-cigarettes.

Non-Residential Roll-Your-Own (RYO) Machine: A mechanical device made available for use (including to an individual who produces rolled marijuana products solely for the individual's own personal consumption or use) that is capable of making rolled marijuana products. RYO machines located in private homes used for solely personal consumption are not Non-Residential RYO machines.

Paraphernalia: "Drug paraphernalia" as defined in M.G.L. Ch. 94C, §1.

Permit to Operate a Registered Marijuana Dispensary (hereafter referred to as "RMD Operating Permit"): A permit issued by the Board of Health, expiring on December 31st and to be renewed annually, that permits a Registered Marijuana Dispensary to operate within the Town of Arlington. A separate RMD Operating Permit is required for each retail establishment selling marijuana and/or marijuana products and for each location, not being the same address as the retail establishment, where the Registered Marijuana Dispensary is approved by the Massachusetts Department of Public Health to cultivate marijuana or prepare MIPs.

Permit to Operate a Registered Marijuana Dispensary Holder (hereafter referred to as "RMD Operating Permit Holder"): Any not-for-profit entity engaged in the sale of medical marijuana that applies for and receives a RMD Operating Permit.

Personal Caregiver: A person, registered by the Massachusetts Department of Public Health, who is at least 21 years old, who has agreed to assist with a Registered Qualifying Patient's medical use of marijuana, and is not the Registered Qualifying Patient's certifying physician. An employee of a hospice provider, nursing, or medical facility or a visiting nurse, personal care attendant, or home health aide providing care to a Qualifying Patient may serve as a Personal Caregiver, including to patients under 18 years of age as a second caregiver.

Qualifying Patient: A Massachusetts resident 18 years of age or older who has been diagnosed by a Massachusetts licensed certifying physician as having a debilitating medical condition, or a Massachusetts resident under 18 years of age who has been diagnosed by two Massachusetts licensed certifying physicians, at least one of whom is a board-certified pediatrician or board-certified pediatric subspecialist, as having a debilitating medical condition that is also a life-limiting illness, subject to 935 CMR 501.010(10).

Agent Registration Card: An identification card formerly and validly issued by the Massachusetts Department of Public Health or currently and validly issued by the Cannabis Control Commission to an RMD or laboratory agent. The registration card allows access into Cannabis Control Commission-supported databases. The registration card facilitates verification of an individual registrant's status, including, but not limited to identification by the Cannabis Control Commission and law enforcement authorities of those individuals exempt from Massachusetts criminal and civil penalties under the act, M.G.L. c. 94I, and 935 CMR 501.000.

Patient Registration Card: An identification card formerly and validly issued by the Massachusetts Department of Public Health or currently and validly issued by the Cannabis Control Commission, to a registered qualifying patient, personal caregiver, RMD agent or laboratory agent. The patient registration card allows access into Cannabis Control Commission-supported databases. The patient registration card facilitates verification of an individual registrant's status, including, but not limited to, identification by the Cannabis Control Commission and law enforcement authorities, of those individuals who are exempt from Massachusetts criminal and civil penalties under M.G.L. c. 94I, and 935 CMR 501.000. A temporary patient registration issued to a qualifying patient shall be deemed a registration card.

Registered Marijuana Dispensary: A not-for-profit entity formerly and validly registered under 105 CMR 725.100 or currently and validly registered under 935 CMR 501.100 that acquires, cultivates, possesses, processes (including development of related products such as edible MIPs, tinctures, aerosols, oils, or ointments), transfers, transports, sells, distributes, dispenses, or administers marijuana, products containing marijuana, related supplies, or educational materials to registered Qualifying Patients or their Personal Caregiver(s). Unless otherwise specified, Registered Marijuana Dispensaries refers to the site(s) of dispensing, cultivation, and preparation of marijuana (for the purpose of this regulation a Medical Marijuana Treatment Center shall also be called a Registered Marijuana Dispensary).

Registered Qualifying Patient: A Qualifying Patient was formerly and validly issued a registration card by the Massachusetts Department of Public Health or is currently and validly issued a registration card by the Cannabis Control Commission.

Self-Service Display: Any display from which customers may select a marijuana product without assistance from a Dispensary Agent or store personnel.

Smoking: The lighting of a cigar, cigarette, pipe or other tobacco product or possessing a lighted cigar, cigarette, pipe or other tobacco or non-tobacco product designed to be combusted and inhaled.

Thirty-Day Supply: That amount of marijuana, or equivalent amount of marijuana in MIPs, that a Registered Qualifying Patient would reasonably be expected to need over a period of 30 calendar days for his or her personal medical use, which is a maximum of 5 ounces.

Tobacco Product: Cigarettes, cigars, chewing tobacco, pipe tobacco, bidis, snuff, blunt wraps or tobacco in any of its forms.

Vending Machine: Any automated or mechanical self-service device, which upon insertion of money, tokens or any other form of payment, dispenses or makes marijuana products.

Written Certification: A form submitted to the Massachusetts Department of Public Health by a Massachusetts licensed certifying physician, describing the Qualifying Patient’s pertinent symptoms, specifying the patient’s debilitating medical condition, and stating that in the physician’s professional opinion the potential benefits of the medical use of marijuana would likely outweigh the health risks for the patient.

D. Permit to Operate a Registered Marijuana Dispensary:

1. No person shall sell or otherwise distribute marijuana or marijuana products within the Town of Arlington without first obtaining a Permit to Operate a Registered Marijuana Dispensary (“RMD Operating Permit”)

issued annually by the Board of Health. Only Registered Marijuana Dispensaries with a permanent, non-mobile location in Arlington, meeting zoning restrictions, are eligible to apply for a RMD Operating Permit to maintain a supply of marijuana or marijuana products at the specified location in Arlington.

2. As part of the application process, the applicant will submit to the Board of Health the detailed summary of operating policies and procedures for the Registered Marijuana Dispensary as submitted with their Phase II application per 935 CMR 501.100, including, but not limited to, provisions for security, prevention of diversion, storage of marijuana, transportation of marijuana, inventory procedures, procedures for quality control and testing of product for potential contaminants, procedures for maintaining confidentiality as required by law, personnel policies, dispensing procedures, record-keeping procedures, plans for patient education, and any plans for patient or Personal Caregiver home-delivery.

3. As part of the RMD Operating Permit application process the applicant will be provided with this regulation. Each applicant is required to sign a statement declaring that the applicant has read said regulation and understands that under this regulation they are responsible for complying with all local and state regulations pertaining to the operation of the Registered Marijuana Dispensary. Specifically, a violation of any provision of 935 CMR 501.000 or other applicable state regulation constitutes a violation of this regulation, which may be enforced by the Board of Health.

4. Each applicant is required to provide proof of a current Certificate of Registration to Operate a Registered Marijuana Dispensary, formerly and validly issued by the Massachusetts Department of Public Health or currently and validly issued by the Cannabis Control Commission, before a RMD Operating Permit can be issued.

5. The Board of Health will hold a public hearing for the applicant to speak regarding their initial application. The Board of Health may require the applicant to furnish additional information regarding their application before voting to grant or deny the RMD Operating Permit. The Board will not hold a public hearing for renewal applications.

6. Each RMD must hold an annual community meeting to provide abutters and community residents with an opportunity to comment on the RMD's operating practices, policies and plans. The community meeting shall be advertised by the RMD through direct mail or other written communication to abutters. A notice of the same shall be advertised in the local newspaper. A report outlining the attendance, comments received, and proposed responses and plans to address the comments shall be submitted to the Board with the renewal application.

7. As a condition of RMD Operating Permit issuance, the Registered Marijuana Dispensary agrees to provide to the Board of Health a copy of their Certificate of Registration, annual renewals thereafter, any changes to the business as described in 935 CMR 501.100(6) and current written operating procedures required in 935 CMR 501.105.

8. As a condition of RMD Operating Permit issuance, the Registered Marijuana Dispensary agrees to provide a home delivery service in accordance with 935 CMR 501.000 to patients who demonstrate an inability to access the Registered Marijuana Dispensary.

9. As a condition of RMD Operating Permit issuance, the Registered Marijuana Dispensary agrees to notify the Board of Health orally and in writing within 24 hours of a visit to the premises or request for information by any representative of the Cannabis Control Commission acting in an official capacity. The

Registered Marijuana Dispensary shall provide the Board of Health with any reports, written or electronic correspondence, or information from the Cannabis Control Commission on demand or, in any case, within five (5) business days after receipt by the Registered Marijuana Dispensary.

10. No applicant is permitted to sell alcohol, tobacco products and/or nicotine delivery products and must not be in possession of either a tobacco sales permit or a liquor license issued by the Town of Arlington and/or its Board of Health.

11. No applicant is permitted to hold a common victualler license or food service permit issued by the Board of Health for on-premises food consumption.

12. Applicants who wish to prepare or sell edible MIPs at their Registered Marijuana Dispensary must undergo the Board of Health plan review process for food establishments prior to beginning operations. All edible MIPs shall be prepared, handled and stored in accordance with the requirements of 105 CMR 590.000: Minimum Sanitation Standards for Food Establishments at all times during operation.

13. No applicant is permitted to be a Massachusetts lottery dealer.

14. A separate RMD Operating Permit is required for each retail establishment selling marijuana and/or marijuana products and for each location, not being the same address as the retail establishment, where the Registered Marijuana Dispensary was formerly and validly approved by the Massachusetts Department of Public Health or is currently and validly approved by the Cannabis Control Commission to cultivate marijuana or prepare MIPs.

15. The RMD Operating Permit shall be displayed in an open, conspicuous place in view of the public.

16. Permit to Operate a Registered Marijuana Dispensary Holders ("RMD Operating Permit Holders") shall at all times ensure the buildings, structures, physical facilities, vehicles, fixtures and equipment of the Registered Marijuana Dispensary are being maintained in a sanitary condition, in good repair, free from defects, and in every way fit for the use intended so as to prevent the occurrence of any nuisance conditions or other conditions which may endanger or impair health, safety or wellbeing of an occupant or the general public.

17. Applicants shall develop a plan, subject to review and approval by the Board of Health, for the safe and secure storage and disposal of all marijuana waste and refuse. The plan shall ensure all marijuana waste and refuse is rendered unusable and is disposed of in accordance with applicable law.

18. RMD Operating Permit Holders shall at all times be subject to periodic, unannounced inspections conducted by the Board of Health. Denial of access to the Board of Health may be grounds for immediate suspension or revocation of a RMD Operating Permit.

19. Issuance and maintaining a RMD Operating Permit shall be conditioned on the RMD Operating Permit Holder's compliance with any orders issued by the Board of Health to correct any deficiencies or violations identified during an inspection.

20. Issuance and maintaining a RMD Operating Permit shall be conditioned on an applicant's on-going compliance with this regulation, the requirements set forth in 935 CMR 501.000, a violation of which constitutes a violation of this regulation, which may be enforced by the Board of Health, all other current

Commonwealth of Massachusetts requirements and policies regarding marijuana sales, as well as all bylaws and zoning bylaws of the Town of Arlington.

21. RMD Operating Permit Holders agree that a Registered Marijuana Dispensary will not open for business before 9:00 am and shall close no later than 8:00 pm daily.

22. A RMD Operating Permit is non-transferable. A new owner of a Registered Marijuana Dispensary must apply for a new RMD Operating Permit. No new RMD Operating Permit will be issued unless and until all outstanding penalties incurred by the previous RMD Operating Permit Holder are satisfied in full.

23. A RMD Operating Permit will not be renewed if the RMD Operating Permit Holder has failed to pay all fines issued and the time period to appeal the fines has expired and/or has not satisfied any outstanding RMD Operating Permit suspensions.

24. The fee for a RMD Operating Permit shall be determined by the Board of Health annually.

E. Dispensary Agent Permit:

1. No Dispensary Agent or person shall sell or otherwise distribute marijuana or marijuana products at a Registered Marijuana Dispensary within the Town of Arlington without first obtaining a Dispensary Agent Permit issued annually by the Board of Health.

2. As part of the Dispensary Agent Permit application process, the applicant will be provided with this regulation. Each applicant is required to sign a statement declaring that the applicant has read said regulation and understands that under this regulation they are responsible for complying with all local and state regulations pertaining to the operation of the Registered Marijuana Dispensary. Specifically, a violation of any provision of 935 CMR 501.000 or other applicable state regulation constitutes a violation of this regulation, which may be enforced by the Board of Health.

3. Each applicant is required to provide proof by means of a valid government-issued photographic identification containing the bearer's date of birth that the applicant is 21 years old or older.

4. Each applicant is required to provide proof of a current Dispensary Agent registration, formerly and validly issued by the Massachusetts Department of Public Health or currently and validly issued by the Cannabis Control Commission, before a Dispensary Agent Permit can be issued.

5. Each applicant is required to provide the Criminal Offender Record Information (CORI) report submitted on their behalf to the Massachusetts Department of Public Health by the Registered Marijuana Dispensary.

6. Issuance and maintaining a Dispensary Agent Permit shall be conditioned on an applicant's on-going compliance with this regulation, the requirements set forth in 935 CMR 501.000, a violation of which constitutes a violation of this regulation, which may be enforced by the Board of Health, as well as all other current Commonwealth of Massachusetts requirements and policies regarding marijuana sales.

7. A Dispensary Agent Permit will not be renewed if the Dispensary Agent Permit Holder has failed to pay all fines issued and the time period to appeal the fines has expired and/or has not satisfied any outstanding Dispensary Agent Permit suspensions.

8. Dispensary Agents must present their Cannabis Control Commission or Massachusetts Department of Public Health Agent Registration Car and Dispensary Agent Permit to any law enforcement officer or municipal agent who questions the agent concerning their marijuana-related activities.

9. The fee for a Dispensary Agent Permit shall be determined by the Board of Health annually.

F. <u>Marijuana Sales at Registered Marijuana Dispensaries</u>:

1. No person shall sell marijuana from any location other than at a Registered Marijuana Dispensary that possesses a valid RMD Operating Permit issued by the Board of Health.

2. Registered Marijuana Dispensaries shall only permit Dispensary Agents to transport marijuana or MIPs on their behalf, whether between dispensaries, dispensary sites, or to Registered Qualifying Patients or Personal Caregivers and follow Cannabis Control Commission guidelines found in 935 CMR 501.110(5) which shall be made available to the Arlington Police Department upon request.

3. Registered Marijuana Dispensaries shall permit entry to the Registered Marijuana Dispensary, to specifically engage in activity expressly or by necessary implication permitted by the MGL Ch. 369 and 935 CMR 501.000, to only Registered Qualifying Patients, Personal Caregivers, Dispensary Agents, persons authorized by 935 CMR 501.105(16) and, subject to the requirements of 935 CMR 501.110(3) (E), outside vendors, contractors and visitors.

4. Registered Marijuana Dispensaries shall limit entry to their "Limited Access Areas" to Dispensary Agents and outside vendors, contractors and visitors meeting the requirements found at 935 CMR 501.110(3).

5. Registered Marijuana Dispensaries shall limit sales and/or transactions to quantities of marijuana, or equivalent amounts of marijuana in MIPs, not to exceed a thirty-day supply. A period of time not less than thirty days must elapse before a Registered Qualifying Patient or Personal Caregiver can obtain another thirty day supply from the Registered Marijuana Dispensary.

6. Dispensary Agents shall verify the Registration Card of the Card Holder by means of a valid government-issued photographic identification. No separate identification is required for valid Registration Cards bearing a photograph of the Card Holder.

7. No person shall distribute, or cause to be distributed, any free samples of marijuana or marijuana products. No means, instruments or devices that allow for the redemption of marijuana or marijuana products are prohibited.

8. Registered Marijuana Dispensaries are prohibited from using self-service displays, vending machines or Non-Residential Roll-Your-Own machines. All retail sales of marijuana must be face-to-face between the Dispensary Agent and the Card Holder and occur at the permitted location, unless the Card Holder is the proper recipient of home delivery in accordance with 935 CMR 501.000.

9. The owner or other person in charge of a Registered Marijuana Dispensary shall conspicuously post signage at all entrances indicating that the entry to persons not possessing a valid Registration Card is prohibited. The notice shall be no smaller than 8.5" by 11" and shall be posted conspicuously in the retail establishment or other place in such a manner so that they may be readily seen by a person approaching the Registered Marijuana Dispensary.

G. Hardship Cultivation Permit:

1. No Registered Qualifying Patient, Personal Caregiver or other person shall cultivate marijuana pursuant to a Hardship Cultivation Registration in accordance with 935 CMR 501.000 within the Town of Arlington without first obtaining a Hardship Cultivation Permit issued annually by the Board of Health.

2. Each applicant is required to provide proof of a current Hardship Cultivation Registration and, where applicable, a current registration card for a Personal Caregiver issued by the Cannabis Control Commission or the Massachusetts Department of Public Health before a Hardship Cultivation Permit can be issued.

3. As part of the Hardship Cultivation Permit application process, Personal Caregivers and Registered Qualifying Patients who cultivate marijuana in the Town of Arlington shall submit a copy of the documents provided to Cannabis Control Commission or the Massachusetts Department of Public Health as outlined in 935 CMR 501.020(1) to the Board of Health.

4. Each Hardship Cultivation Permit Holder shall at all times ensure the cultivation site is being maintained in a sanitary condition, in good repair, free from defects, and in every way fit for the use intended so as to prevent the occurrence of any nuisance conditions or other conditions which may endanger or impair health, safety or wellbeing of an occupant or the general public.

5. A portable fire extinguisher that complies with the regulations and standards adopted by the State Fire Marshal and applicable law shall be securely mounted at each entrance to the room where the cultivation occurs.

6. Hardship Cultivation Permit Holders shall at all times be subject to cultivation site inspections conducted by the Board of Health. Denial of access to the Board of Health may be grounds for immediate suspension or revocation of a Hardship Cultivation Permit.

7. Issuance and maintaining a Hardship Cultivation Permit shall be conditioned on the Hardship Cultivation Permit Holder's compliance with any orders issued by the Board of Health to correct any deficiencies or violations identified during an inspection.

8. Issuance and maintaining a Hardship Cultivation Permit shall be conditioned on the applicant or Hardship Cultivation Permit Holder's on-going compliance with this regulation, the requirements set forth in 935 CMR 501.000, as well as all bylaws and zoning bylaws of the Town of Arlington.

9. The fee for a Hardship Cultivation Permit shall be determined by the Board of Health annually.

H. Registration Card Holders:

A Registered Qualifying Patient, Personal Caregiver or a Dispensary Agent must notify the Arlington Police Department after he or she discovers that his or her Registration Card has been lost or stolen.

I. Incorporation of 935 CMR 501.000:

All Registered Marijuana Dispensaries shall comply with the provisions of 935 CMR 501.000.

J. Financial Security:

RMD Operating Permit Holders shall provide a non-cancellable surety bond or other form of surety approved by the Board of Health to cover the cost of removal, closure and/or clean-up in the event the Town must remove, close and/or clean-up the Registered Marijuana Dispensary. The amount and form of the surety bond or any other form of surety shall be determined by the Board of Health, but in no event shall exceed more than 150 percent of the cost of removal, closure and/or clean-up. The RMD Operating Permit Holder shall submit a fully inclusive estimate of the costs associated with removal, closure and/or clean-up, prepared by a qualified Hazardous Waste Remediation Contractor.

K. Violations:

1. Upon a finding that a RMD Operating Permit Holder, a Dispensary Agent Permit Holder or a Hardship Cultivation Permit Holder has violated any provision of this regulation, the Board of Health may order, in writing, the person(s) responsible for violating this regulation to correct any violation of the provisions of this regulation within a specified timeframe.

2. It shall be the responsibility of the RMD Operating Permit Holder and the Dispensary Agent Permit Holder to ensure compliance with all sections of this regulation pertaining to his or her distribution and/or cultivation of marijuana and/or marijuana products. The violator shall receive:

    a. In the case of a first violation, a fine of three hundred dollars ($300.00**)**.

    b. In the case of a second violation within 36 months of the date of the current violation, a fine of three hundred dollars ($300.00) and the RMD Operating Permit or Dispensary Agent Permit shall be suspended for seven (7) consecutive business days.

    c. In the case of three or more violations within a 36 month period, a fine of three hundred dollars ($300.00) and the RMD Operating Permit or Dispensary Agent Permit shall be suspended for thirty (30) consecutive business days.

    d. The Board of Health reserves the right to permanently revoke a RMD Operating Permit, Dispensary Agent Permit or Hardship Cultivation Permit for cause.

    e. If a permit holder has obtained a permit or license from any other licensing or permitting authority within the Town of Arlington, the Board of Health shall notify such authority in writing of any violations of this regulation

    f. Refusal to cooperate with inspections pursuant to this regulation shall result in the suspension of the RMD Operating Permit and/or Dispensary Agent Permit.

    g. In addition to the monetary fines set above, any RMD Operating Permit Holder or Dispensary Agent Permit Holder who engages in the sale or distribution of marijuana or marijuana products while his or her RMD Operating Permit or Dispensary Agent Permit is suspended may be subject to the suspension and/or revocation of all Arlington-issued permits and licenses.

h. The Board of Health shall provide notice of the intent to suspend or revoke a RMD Operating Permit, Dispensary Agent Permit, or Hardship Cultivation Permit, which notice shall contain the reasons therefore and establish a time and date for a hearing, which date shall be no earlier than seven (7) days after the date of said notice. The RMD Operating Permit Holder, Dispensary Agent Permit Holder, Hardship Cultivation Permit Holder or other involved party shall have an opportunity to be heard at such hearing. At the conclusion of the hearing, the Board of Health shall vote to suspend or revoke the RMD Operating Permit, Dispensary Agent Permit or Hardship Cultivation Permit if cause for such action is found. All involved parties shall be notified in writing of the Board of Health's decision within seven (7) days of the hearing. For purposes of such suspensions or revocations, the Board of Health shall make the determination notwithstanding any separate criminal or non-criminal proceedings brought in court hereunder or under the Massachusetts General Laws for the same offense. All marijuana and marijuana products shall be removed from the retail establishment upon suspension of the RMD Operating Permit. Failure to remove all marijuana and marijuana products shall constitute a separate violation of this regulation.

L. Non-Criminal Disposition:

Whoever violates any provision of this regulation may be penalized by the non-criminal method of disposition as provided in Massachusetts General Laws, Chapter 40, Section 21D or by filing a criminal complaint at the appropriate venue.

Each day any violation exists shall be deemed to be a separate offense.

M. Enforcement:

Enforcement of this regulation shall be by the Arlington Board of Health or its designated agent(s).

Any resident who desires to register a complaint pursuant to this regulation may do so by contacting the Arlington Board of Health or its designated agent(s) and they shall investigate.

N. Severability:

If any provision of this regulation is declared invalid or unenforceable, the other provisions shall not be affected thereby but shall continue in full force and effect.

O. Effective Date:

This regulation shall take effect on _____, 2019.

1. _____ Marie Walsh Condon, MD

2. _____ Kenneth Kohlberg, JD, MPH

3. _____ Kevin Fallon, DVM